

























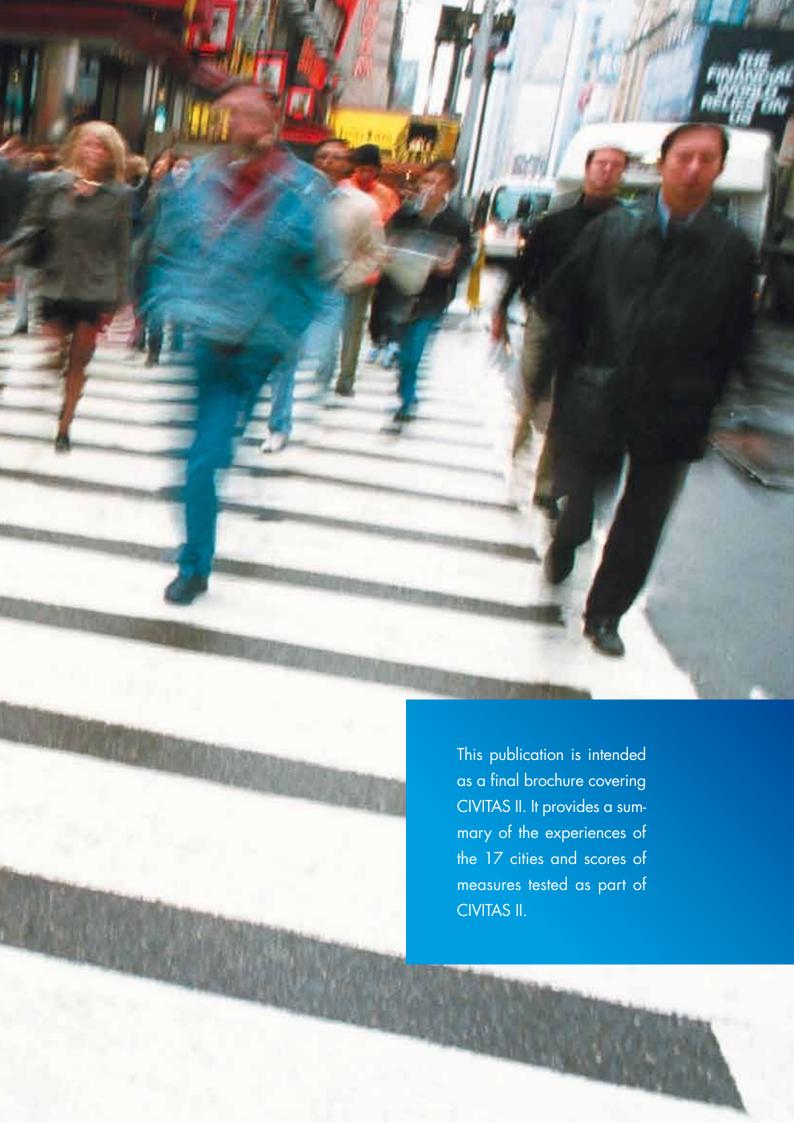




CiViTAS

# CLEANER AND BETTER TRANSPORT IN CITIES





# Dear reader, Dear CIVITAS family,

A large majority of European citizens live in an urban environment, with over  $60\,\%$  living in urban areas of over 10,000 inhabitants. They spend their daily lives in the same space, and for their mobility share the same infrastructure. Urban mobility accounts for 40 % of all  ${\rm CO_2}$  emissions of road transport and up to 70 % of other pollutants emanating from transport.

European cities increasingly face problems caused by transport and traffic. The question of how to enhance mobility while at the same time reducing congestion, accidents and pollution is a common challenge to all major cities in Europe. Congestion in the EU is often located in and around urban areas and costs nearly 100 billion EURO, or 1 % of the EU's GDP, annually. Cities themselves are usually in the best position to find the right responses to these challenges, taking into account their specific circumstances.

CIVITAS II is a good example of how the EU can support cities with funding aimed at illustrating innovative technologies and policy measures for promoting clean vehicles, public transport and other more sustainable modes such as walking and cycling. Efficient and effective urban transport can significantly contribute to achieving objectives in a wide range of policy domains for which the EU has an established competence. The success of policies and policy objectives that have been agreed at EU level, for example on the efficiency of the



Siim KALLAS
Vice President of the European
Commission and Commissioner
for Transport

EU transport system, socio-economic objectives, energy dependency, or climate change, partly depends on actions taken by national, regional and local authorities. Mobility in urban areas is also an important facilitator for growth and employment and for sustainable development in the EU areas.

Sustainable transport must be a priority for a post-2010 EU transport policy and therefore the main objective of the European Commission is to make transport sustainable!

With the CIVITAS Initiative we are able to make an important contribution to the key issues of urban mobility: free-flowing and greener towns and cities, smarter urban mobility and urban transport which is accessible, safe and secure for all European citizens.

I would like to congratulate and thank you for a successful CIVITAS II and for all your efforts to make Europe's mobility a more sustainable one!

My sincere wishes to all of you!

Siim Kallas

Vice President responsible for Transport, European Commission



Jean YATES
Chair of the CIVITAS Political
Advisory Committee

## Dear All,

CIVITAS II has now come to an end, but that doesn't mean that the work we have started should finish. There was CIVITAS I before us, starting back in 2002, which provided a foundation for the CIVITAS Initiative and delivered stories of achievements and hurdles from which the CIVITAS II cities could learn. We hope that through the delivery of our CIVITAS II projects across Europe, we can provide both positive stories of success and words of warning to help improve the efficiency with which cities can deliver sustainable mobility measures in the future.

There have been many challenges over the past five years since we embarked on our journey through CIVITAS II, all of which I would like to think have made us stronger. Importantly we have worked together, both within our individual projects and as the wider CIVITAS family, to develop innovative practical solutions to these challenges.

The partnerships and friendships which have been developed at local, national and European levels, between both technical officers and political representatives have been both fruitful and enjoyable and I am sure they will continue and stay strong and reap benefits in to the future.

Now that CIVITAS II has drawn to a close we can look back with pride at what we have all achieved, through hard work and a collective will to make a difference to the mobility choices available to the citizens we serve. As more people move to live in urban areas, the pressure on our mobility solutions will only increase, so we need to redouble our efforts to continue to make progress towards a more sustainable mobility culture.

Our opportunity to help shape the future is already here, through the CIVITAS PLUS projects and the future CIVITAS scheme identified in the Action Plan on urban mobility. These challenges must be taken to reach out to more citizens to encourage them to change their behaviour and help to make their Cities better places to live.

Best wishes to you all,

Jean Yates

Chair of the CIVITAS Political Advisory Committee, 2007–2009



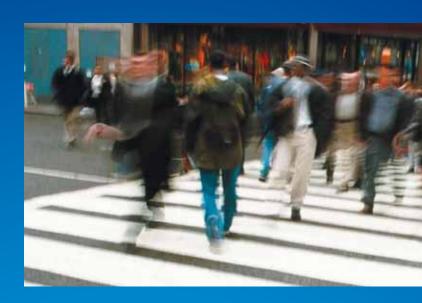
# CONTENTS



# CiViTAS

1.	THE CIVITAS INITIATIVE		8
	1.1 The CIVITAS Philosophy		9
	1.2 CIVITAS Key Elements and Political Commitm	nent	12
	1.3 Participating Cities in CIVITAS II		18
	1.4 The CIVITAS Forum Network – A Family with	Shared Visions	28
	1.5 CIVITAS: A Brand Identity for Sustainable Ur	ban Transport	36
2.	THE EIGHT BUILDING BLOCKS		
	OF AN INTEGRATED STRATEGY		40
	2.1 Clean Fuels and Vehicles		42
	2.2 Integrated Pricing Strategies		45
	2.3 Less Car Intensive Lifestyle		49
	2.4 Soft Measures		53
	2.5 Access Restrictions		56
	2.6 Collective Passenger Transport		60
	2.7 Urban Goods Transport		64
	2.8 Transport Management		67
3.	CIVITAS II FACTS & FIGURES 2005	-2009	<i>7</i> 1
4.	CONTACTS		80
5.	BIBLIOGRAPHY		82





# THE CIVITAS INITIATIVE

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This chapter describes the CIVITAS Initiative, the CIVITAS philosophy, the key elements for success and political commitment, the participating cities, the CIVITAS Forum Network, and the CIVITAS brand.

# CiViTAS



Offering travel options that rely on cleaner, better and co-ordinated forms of transport.

# THE CIVITAS PHILOSOPHY

#### WHEN IS LESS MORE?

A great architect of the last century, Ludwig Mies van der Rohe is quoted as saying, "Less is more" when referring to his building designs. This concept can also apply to our cities. Fewer cars clogging streets and parking lots can make for a better urban environment. Fewer cars allow more use of urban spaces by people strolling, riding their bicycles, sitting in sidewalk cafes, playing or just standing watching the world go by. Fewer cars also means that the air is cleaner and we have fewer worries about energy resources.

But, how can we reduce our dependency on cars and still do all the things we need to do? Get to work or school, shop or visit friends? The answer lies in the concept of sustainable urban transport. Offering travel options that rely on cleaner, better and co-ordinated forms of transport. This includes enhanced public transport, walking, cycling, sharing rides in cars, and new ways for moving goods and freight. Supporting these more sustainable forms of transport are the use of cleaner vehicles (alternative fuels) and new parking and planning policies and incentives for more sustainable travel behaviour.

#### THE CIVITAS INITIATIVE – LA DOLCE VITA

Old habits are hard to break, so considerable demonstration and testing is needed to see if urban dwellers are

willing to embrace these more sustainable forms of transport. This is the impetus for the CIVITAS Initiative. Co-funded by the European Commission, CIVITAS is an initiative of almost 60 European cities that are committed to implement cleaner and better transport for their citizens.

At the heart of CIVITAS is life – VITA means "life" in Latin. CIVITAS breathes life into cities by making them more vibrant, a place where people want to be and spend time! This, in turn, makes cities more attractive places for businesses to locate. CIVITAS renews the lives of residents by offering them viable alternatives to driving their cars, getting them into buses, onto bicycles and sidewalks, with the promise of better health and quality of life.



# So, what is CIVITAS?

The CIVITAS Initiative has been implemented in three generations of demonstration projects over the last eight years: CIVITAS I, CIVITAS II and CIVITAS PLUS.

Several things are apparent from the map above. Firstly, CIVITAS focuses on medium-sized cities. Faced with almost paralyzing traffic congestion Europe's largest cities (e.g. London, Paris) have made considerable investments to reduce car use – a car is often not very feasible or practical given the distances and journey times involved. These cities also have considerable capacities and support from their national governments to implement sustainable transport solutions. As such, the catalyst provided by

CIVITAS is not really needed in some of the largest cities.

Secondly, it can be seen that CIVITAS is represented in almost every member nation of the European Union, including most new member states. This is intentional, because the "car culture" of many new member states is often not yet fully established and CIVITAS aims to create cleaner, better urban transport environments as these cities regenerate. Finally, new cities were included in each phase of CIVITAS. Concepts learned in CIVITAS I and II are now being applied in new cities in CIVITAS PLUS and will be applied in even more cities in successive CIVITAS Initiatives.

#### **CIVITAS I**

spanned 2002-2006, included 19 cities and was organised into four project clusters. It was funded from the 5th Research Framework Programme of the European Commission Directorate General for Energy and Transport (DG TREN).

#### **CIVITAS II**

included 17 cities in four projects, spanned 2005-2009, and was funded from the 6th Research Framework Programme.

#### **CIVITAS PLUS**

began in 2008, includes currently 25 cities (three of which were part of CIVITAS I or II) in five demonstration projects and is funded from the 7th Research Framework Programme.

The CIVITAS Initiative has worked towards three critical objectives since its inception:

1

to promote and implement sustainable, clean, and (energy) efficient urban transport measures

2

to implement and evaluate integrated packages of technology and policy measures in the field of energy and transport

3

to build up critical mass and markets for successful innovative concepts and packages

# What does CIVITAS aim to Accomplish?

The second objective is perhaps the most important and is what makes CIVITAS so unique. Whereas many programs test one new innovation, CIVITAS recognises the need to test packages of measures that integrate "hard" (technology) and "soft" (policy) innovations. Testing new technologies without considering the market for their use or enabling legislation required for widespread implementation is a bit like testing a new perfume in a laboratory devoid of human noses. Therefore, the focus on integrated packages of measures is absolutely key to the success of CIVITAS, both as a test-bed for a new approach to urban transport as well as its success in each city.

The CIVITAS Initiative helps cities to achieve a more sustainable, clean and energy efficient urban transport system by implementing, demonstrating, and evaluating an ambitious integrated mix of technology and policy based measures.

As a research programme, CIVI-TAS has helped to test various sustainable transport measures in cities. The European Commission provided cofunding to local partners to implement integrated packages of strategies.



Taking just one typical example, in La Rochelle, France (population 160,000), the urban community implemented some 16 measures, including:

- → new clean buses and biofuel refuelling stations
- → bus route reorganisation, new park-and-ride, integrated ticketing and real-time information
- → travel planning for businesses and schools
- → new bike routes and bike-on-bus schemes
- access control zone expansion
- → car-sharing enhancement
- → work with delivery companies and freight operators

  The measures were all evaluated using a common framework and La Rochelle shared its experiences with other

  CIVITAS cities.

CIVITAS does not live within the laboratory; it thrives in the real world!



Harry Schiffer

# CIVITAS KEY ELEMENTS AND POLITICAL COMMITMENT

# The Key Elements of CIVITAS

Since the inception of CIVITAS almost ten years ago, the basic structure and key elements have remained the same. The four key elements of CIVITAS are:



# THE STRUCTURE OF CIVITAS - ESSENTIAL ELEMENTS

Cities are at the heart of CIVITAS. All three CIVITAS phases (I, II and PLUS) have been organised in a similar fashion. Each phase includes 4-5 projects, or clusters of demonstration cities with similar interests and areas of emphasis e.g. clean fuels, mobility management, etc. (see graph below).

# DEMONSTRATION PROJECTS AND "GUARD"

CIVITAS projects are a convenient means for a number of cities to work together towards common goals. All together, the 17 demonstration cities in CIVITAS II developed, implemented and tested just over 200 measures, packaged into integrated strategies for each city. CIVITAS II was co-funded by the European Commission (EUR 50 Mio) and participating cities (more than EUR 150 Mio). To implement the measures to be demonstrated, these cities formed partnerships with other local stakeholders, both public (e.g. public transport providers, universities) and private (technology vendors, freight logistics companies, and employers, etc.). CIVITAS efforts also engaged the public, including: residents, visitors, travellers, workers, and voters. As such, CIVITAS is very inclusive in its

approach, an essential element of sustainability. Using the cities as laboratories, an objective evaluation was undertaken by a consortium of experts. They assessed the success of CIVITAS in fulfilling its objectives, from both a technical and policy perspective. In the case of CIVITAS II, the cross-site evaluation was conducted by a supporting action – CIVITAS GUARD – building on the individual evaluation of measures provided by the projects at city level. Many of the findings reported in the next two chapters are derived from CIVITAS GUARD.

All together, the 17 demonstration cities in CIVITAS II developed, implemented and tested just over 200 measures, packaged into integrated strategies for each city.

#### CIVITAS II included four demonstration projects involving the following cities:



Included cities: Burgos, Genoa, Kraków and Stuttgart



Included cities:
Debrecen, Ljubljana, Odense, Toulouse and Venice



Included cities: Malmö, Norwich, Potenza, Suceava and Tallinn



Included cities:
La Rochelle, Ploiesti and Preston



Mirjam Logonder

The CIVITAS Political Advisory Committee (PAC) serves as a conduit for policy matters related to CIVITAS and its outcomes.

# CIVITAS Forum Network and Political Advisory Committee (PAC)

CIVITAS is, therefore, a structured program of research and demonstration, testing and compiling documentation of the impacts of various integrated packages of measures on urban transport. Yet CIVITAS is much more.

CIVITAS does not live within the laboratory; it thrives in the real world! In addition to the CIVITAS project work, a Political Advisory Committee is active to provide policy recommendations and feedback to the European Commission and to raise awareness of clean and better urban transport among policy makers. This is part of the political commitment required of all participating cities in the CIVITAS family. The CIVITAS Political Advisory Committee (PAC) is discussed at greater length below.

Another structural component of CIVITAS is the CIVITAS Forum Network, a real and virtual gathering place for the exchange of experiences and ideas within CIVITAS family of cities, to other cities in Europe, and, increasingly, to other cities around the world. The CIVITAS Forum Network and its annual conference are discussed later in this chapter.

#### **POLITICAL COMMITMENT**

When CIVITAS was conceived, it was intended not only to provide technical findings on what makes for cleaner and better urban transport, but also to assure that the measures and their integration into cities were politically viable. The independent CIVITAS GUARD evaluation activities therefore encompass both technical and policy components. The most technically sound and effective measure is rendered useless if policy-makers cannot support its implementation in their city.

Thus, being part of CIVITAS requires real political commitment. Any city that wants to participate in CIVITAS is required to make a formal commitment to embrace and further the

aims of the initiative in terms of sustainable urban transport. More about this individual city commitment is provided later in this chapter when we talk about the CIVITAS Forum Network.

# POLITICAL ADVISORY COMMITTEE - PAC

The CIVITAS Initiative goes beyond evaluating the policy implications of sustainable transport measures tested in the participating cities – it also aims to gather further insight into enlightened approaches to policy-making by seeking the advice and input from local politicians. The Political Advisory Committee is a group of dedicated, highly motivated locally elected officials that are appointed by the European Commission from among the CIVITAS Forum Network members. The CIVITAS Political Advisory Committee (PAC) serves as a conduit for policy issues related to CIVITAS and it's objectives and outcomes. On the

one hand, it represents the CIVITAS Forum Network cities at high-level European discussions and events. On the other hand, it provides a sounding board for the European Commission for issues related to urban transport. Findings from CIVITAS are not just reports from researchers, technicians, and local administrators – cleaner and better transport in cities is also a matter of fulfilling political mandates and engaging with citizens on how to address popular and unpopular issues of importance to them.

The Political Advisory Committee comprises some 16 members and is constituted every two years. PAC members are all locally elected officials (city council members, deputy mayors, etc.) but serve on the PAC in a personal capacity. PAC members can serve for up to three 2-year terms and the PAC is supported by its own secretariat. The PAC elects a committee chair who presides over PAC meetings and activities.

The work of the PAC contributes to the strategic direction for CIVITAS and informs the European Commission on related policy initiatives. In this latter capacity, PAC representatives periodically meet with high-level representatives of the European Commission to discuss current political issues. For example, during CIVITAS II, the European Commission developed two landmark documents on the topic of sustainable urban transport; the Green Paper: Towards

The role of the CIVITAS Political Advisory Committee is to:

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Determine policy priorities for cleaner and better urban transport and relate these to the current and future work of the CIVITAS Initiative

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Provide these policy recommendations in the form of short "PAC Notes"

 $\rightarrow$ 

Provide considered input into other EC initiatives, regarding CIVITAS aims



Define important themes on urban transport policy to be discussed at events such as the CIVITAS Forum Network's Annual Conference (as well as select the host city for this event)

a New Culture for Urban Mobility and the Action Plan on Urban Mobility. The PAC provided formal input to each of these documents, based both on the policy priorities identified by the PAC, and the collective political experience of PAC members.

An the one hand, the CIVITAS Political Advisory Committee represents the CIVITAS Forum Network cities at high-level European discussions and events. On the other hand, it provides a sounding board for the European Commission for issues related to urban transport.



for Urban Mobility and

the Action Plan on

Urban Mobility

<sup>&</sup>lt;sup>1</sup> http://ec.europa.eu/transport/urban/urban\_ mobility/urban\_mobility\_en.htm

# PAC MEMBERS COMMITTED TO CIVITAS?

What are the benefits of the PAC to the CIVITAS Initiative? And why do PAC members devote their time and energy to CIVITAS? To answer these questions, we interviewed two members of the PAC to ask them about their involvement. We caught up with Mr. Roman Jakic, incoming Chair of the PAC for 2009 and two-term PAC member, Mr. Sandor Nagy at the CIVITAS Forum meeting in Kraków, Poland.



Roman Jakic
Chair, CIVITAS PAC and Councillor,
Ljubljana City Council, Slovenia

**Mr. Jakic** was elected chair of the PAC as of November 2009. He is a city councillor for the City of Ljubljana, Slovenia and former member of the European Parliament. Ljubljana has been involved in CIVITAS II and is currently part of CIVITAS PLUS. Mr. Jakic has been involved with CIVITAS for six years.

Interviewer: Why is sustainable transport important to you?

Mr. Jakic: I am interested in creating an environment where my kids and your kids can live better, breath cleaner air, and be safe on their bikes or walking. CIVITAS has the energy and will to do something concrete to assure that this happens.

Why did you decide to commit time and energy to the CIVITAS PAC?

**Mr. Jakic:** Well we have good people at the City that are working hard on sustainable transport and with my contacts at the EC and in European politics, I feel I can be a voice for them and other experts in the field. Perhaps

I can be a small stone in the mosaic of cleaner and better transport at the local level.

Does the PAC have an influence on EC policy regarding sustainable transport?

Mr. Jakic: The cleverest way to influence policy is to take the good arguments of experts working in the field and defend them at the political level. Clearly, the Urban Mobility Green Paper and Action Plan is built upon the work of the CIVITAS Initiative. The PAC has the entrance ticket to the political process and has provided input to the EC through its meetings, and papers.

What are your goals for your term as PAC Chair?

Mr. Jakic: I have three goals: First, to move forward with concrete actions, such as the expanded use of electric vehicles; second to determine if anything is missing from the Action Plan; and, third, to expand the dialog beyond Europe to other continents.

In hindsight, what might have been done differently?

Mr. Jakic: The EC is quite open and encouraging of the consultative process with cities and the CIVITAS family, but the process to create the Action Plan could have been accomplished a bit faster. The timing of its release is somewhat unfortunate given the economic crisis facing the world at this time

What will you consider to be success regarding the PAC in two years time?

Mr. Jakic: If we can increase the proportion of the European transport budget spent on sustainable transport, which is currently 9%, and the number of CIVITAS Forum Network members. This will place CIVITAS more prominently on the map.

The PAC is composed of "real workers," people who deal with urban transport every day – not researchers or consultants. Our input is very practical, not theoretical.

# Sandor Nagy Member, CIVITAS PAC and Vice-Mayor, Szeged, Hungary



**Mr. Nagy** is a two-term member of the PAC, reappointed in November 2009. He is a Vice Mayor of the City of Szeged, Hungary. Szeged is not a member of a CIVITAS project, but has been an active member of the CIVITAS Forum Network. Mr. Nagy has been involved with CIVITAS for four years.

Interviewer: How did you get involved in CIVITAS?

Mr. Nagy: Szeged has been involved in other EC initiatives and we proposed to be involved in CIVITAS PLUS, but were unsuccessful. DG TREN had also conducted a meeting in Hungary and promoted the CIVITAS Forum Network, so we decided to join.

Why did you decide to commit time and energy to the CIVITAS PAC?

Mr. Nagy: The European Union and Commission are very complicated with many layers and policies, but DG TREN wanted direct involvement of cities, not member countries. CIVITAS is an important forum and I felt it important to get involved.

What has membership on the PAC done for you?

**Mr. Nagy:** CIVITAS encourages me. It helps me know that we are on the right track in Szeged. At Forum meet-

ings, I see that other cities have successfully coped with the same issues. We have good people back home who understand "hard" and "soft" measures and, even though we do not get funding from CIVITAS, it allows us to use the fund we do receive, such as regeneration monies, to create better transport options and shared spaces. This is the case with the expansion of our university hospital.

Does the PAC have an influence on EC policy regarding sustainable transport?

Mr. Nagy: The PAC is composed of "real workers," people who deal with urban transport every day – not researchers or consultants. Our input is very practical, not theoretical. Our detailed input to the Urban Mobility documents was a significant effort and likely more influential than our short, policy notes. While we see some of the inputs to EC policy have made

their way into key documents, others have not. For example, the PAC felt that standardisation, of equipment and technology, across Europe was an important issue, but it did not appear in the Action Plan.

What does the PAC do best?

Mr. Nagy: First, CIVITAS involves some controversial issues that may not be popular with politicians and citizens. The PAC can help implementers and the EC understand the best way to convince locals of the benefits of these measures. Second, the PAC can provide concrete and specific advice to the EC, not on how to administer CIVITAS, but on what is new and innovative. As such, the EC can probably even make greater use of the PAC for this very practical input that is based on real world experience.

Cities are at the heart of CIVITAS



# PARTICIPATING CITIES IN CIVITAS II

At the core of CIVITAS II were 17 demonstration cities that desired to test integrated packages of hard and soft urban transport measures. While CIVITAS also includes the broader CIVITAS Forum Network (discussed in the next section) and the policy input of the Political Advisory Committee, it is the demonstration cities that have produced the tangible results reported in the next chapter.

CIVITAS II cities ranged in size, were distributed throughout the EU, and included cities with both considerable as well as limited experience with innovations in sustainable transport. CIVITAS II cities were located in twelve of the 27 member states of the European Union. Considering the cities involved in all

three phases of CIVITAS, the partners involved in the CIVITAS GUARD Support Action, and the cities in the CIVITAS Forum Network, then CIVITAS reaches out to almost all member states. The local sponsors of CIVITAS were municipalities (remembering that CIVITAS is a "project of cities for cities"). No city involved in CIVITAS II possesses more than one million inhabitants. The largest city, Kraków, has three-quarters of a million residents and the smallest, Potenza, has less than 70,000 residents. The average number of residents for all the cities in CIVITAS is just over a quarter of a million (288,000). Of course, these cities draw travellers (such as commuters) from much larger areas - one area having over two million inhabitants (Stuttgart) and most of the measures serving travellers from outside the city limits. Some participating cities, such as Odense and Stuttgart, had considerable experience and a tradition of sustainable transport. Other cities were relatively new to innovative urban mobility solutions, especially those in new member states.

Differences notwithstanding, all the cities had the drive and commitment to seek cleaner and better transport for their citizens. Although collaboration in a shared-cost action carries administrative and operational overheads as compared to working alone, the benefits of mutual learning more than compensate. Cities learned from and supported one another, both within each of the four projects (CARAVEL, MOBILIS, SMILE and SUCCESS) and among the entire CIVITAS Forum Network.

# What Motivated Cities to be Part of CIVITAS?

We directly asked CIVITAS II cities why they were motivated to become a demonstration city. We heard back from almost all of the participating cities and their responses were quite consistent.

First, most cities noted the desire to join a European-wide consortium so that they might learn from others and share their own experiences with sustainable transport. Second, many cited political leadership that wanted to take sustainable transport to the next level by implementing new and innovative measures. In other cases, it was a key local champion that pushed for involvement in CIVITAS, such as a transport professor in Kraków or the president of the regional public transport authority in Toulouse. Some noted the ability, through CIVITAS, to

integrate individual measures into a package of complementary actions. A couple of cities, for example Venice, noted that they were already developing plans for a series of individual measures and CIVITAS provided a framework to integrate all the measures into a coordinated, consolidated package. Finally, the CIVITAS "philosophy" of seeking cleaner and better transport through integrated efforts was consistent with the plans and aims of some cities, such as Stuttgart. As such, joining CIVITAS was a logical idea.

# What Did Cities See as the Key to Success?

Not only were we interested in why cities participated in CIVI-TAS, we also asked cities "what was the key to the success of their CIVITAS efforts".

Political commitment headed the list of key success factors by many cities. This involved having elected city officials that supported the aims of sustainable transport, through their policies, funding decisions, and influence. Another oft-mentioned success factor was organisation – having effective partnerships involving all key stakeholders, including: city staff, transport providers, researchers, contractors, etc. The power of effective partnerships was mentioned by (amongst others) Ljubljana, Venice and Toulouse. Citizen participation, especially prior to implementation and among various target markets, was also noted as an important factor by cities such as

Suceava and Odense. Additionally, many cities said that being part of a project that demanded rigor and evaluation was also very important to the success of the demonstration measures. Evaluation allowed measures to be modified as soon as problems were identified. The sharing of experiences brought about by a European-wide project was also cited as a key factor by Ploiesti, Tallinn, Preston and Stuttgart. Finally, the issue of measure integration was mentioned many times, in this case as a success factor because it created a new environment - a new culture for mobility in places like Debrecen and Potenza.



Find the individual answers of all 17 CIVITAS II demonstration cities on the following pages.



### **BURGOS**

# Why did your city take part in CIVITAS as demonstration city?

We received a lot of political support and the City Council was very involved as they wanted to take part in a sustainable transport initiative. They also wanted to belong to a strong European network of cities, participate in the CIVITAS Forum Network and, of course, implement the actions that could change its transport landscape and improve the quality of life.

What are / were your keys to success within your CIVITAS demonstration city?

A big key to success was the citizen, political and technical support and involvement and the stakeholders consultation from the very beginning (which assured that the citizens received the measures in a good frame of mind). Another important key was the celebration of the CIVITAS Forum Conference in 2006. The city wanted to show-off the good actions that were implemented and the measures it supported. Prior to this conference, the city had already implemented the bicycle system, the new buses, and the first actions for the pedestrian area, including a pair of bollards.



#### **DEBRECEN**

# Why did your city take part in CIVITAS as demonstration city?

By raising the standards of urban mobility in Debrecen, the measures made possible through CIVITAS are major contributions to our attempts to improve the quality of life of our citizens. The smooth cooperation between local actors proved to be effective in creating a sustainable mobility framework



for all transport modes. This is one of the most important success factors of local mobility achievements through CIVITAS. Politicians and stakeholders realized the importance of involving all the different actors in the process of sustainable development and being able to address future transportation challenges in Debrecen.

# What are / were your keys to success within your CIVITAS demonstration city?

The main goals of the Debrecen project partners were to maintain the current modal split and to create a well-organized sustainable mobility

framework for all transport modes. During the process, Debrecen focused on environmental and economic, but also on social aspects, as it was necessary to identify, understand and satisfy the specific needs of different social groups. The politicians and stakeholders realized the importance of participating in a European project as a demonstration city. Thus, the CIVITAS measures remain a major contributor to improving the quality of life for the citizens of Debrecen by raising the standards of urban mobility. This is a new approach in the development of the life of the city because Debrecen had not participated in a project as a demonstration city before. The project established a new way of lateral thinking that can be the basis of future developments.



# GENOA

# Why did your city take part in CIVITAS as demonstration city?

In the last decade several actions in the field of innovative urban mobility issues have been taken by the City of Genoa, but the decisive step still needed to be taken in order to achieve significant results on the urban transport system providing structural answers to mobility needs and planning a future sustainable development. For these reasons the City of Genoa decided to continue its work answering to the CIVITAS II call in order to co-operate and share experiences with other cities with common objectives. CIVITAS CARAVEL made a great contribution to defining mobility strategies in Genoa. Moreover, all activities planned within this context became an integral part of the strategic Genoa Urban Mobility Plan (UMP) framework. Measures such as mobility credits, car sharing or reserved bus lane control are key elements of the UMP which will be taken further after CIVITAS has reached completion. At the same time they are increasingly developing into a new urban mobility culture.

# What are / were your keys to success within your CIVITAS demonstration city?

The City of Genoa has developed integrated actions to cope not only with private transport demand but also with other transport sectors; the main actions concern the renewal of the public transport fleet, the extension of the car sharing service, the application of different demand management strategies (blue area parking pricing scheme, access control scheme, van

sharing initiative and mobility credits), flexible transport, high mobility corridors for public transport. These interventions have been integrated with other actions such as: car pooling policy, intermodal information mobility platform, road safety monitoring centre, traffic and environmental impact assessment tools, mobility management strategies, mobility forums. The various sectors interested by CIV-ITAS measures, their integration, the involvement and the support given by the administration to other initiatives (for example the local car sharing operator) are the keys to success.





# Why did your city take part in CIVITAS as demonstration city?

For Kraków, CIVITAS was our first EU research-demonstration project. We wanted to gain experience with developing measures in an integrated way. We were encouraged to participate by a local transport professor and we used his contacts to develop our proposal. Finally, the CIVITAS philosophy fits our current urban transport problems in 2004.

# What are / were your keys to success within your CIVITAS demonstration city?

The keys to our success were mainly gaining political support and establishing a good, broad local team among the partners. I also think that it has really helped being open to all new ideas, tools and solutions from Europe and trying to gain as much as possible from others' good experience.



# Why did your city take part in CIVITAS as demonstration city?

Being a member of the CIVITAS Family and a demonstration city appeared to be completely in line with the urban mobility strategy developed in La Rochelle. The CIVITAS Initiative came at a perfect time locally, when innovative and ambitious measures were necessary to reduce car ownership and to foster a new culture of mobility. Local decision makers were looking to offer diversity and freedom to choose among a large range of transport modes in the La Rochelle area. CIVITAS largely contributed to meet this objective. In particular, the financial support for equipment and innovative, environmental-friendly solutions has had a high-leverage effect at local level. As a result, the CIVITAS efforts marked a major step forward in La Rochelle's sustainable mobilityoriented services, by improving the

existing PT solutions, by organizing multimodality, and by giving more coherence and visibility to all public transport services.

# What are / were your keys to success within your CIVITAS demonstration city?

In La Rochelle, the most important key to success was to give birth to a real comprehensive integrated mobility policy. Before getting involved in CIVITAS, the mobility policy of La Rochelle was based on independent alternatives to the private car. Thanks to CIVITAS, large efforts were made

to provide coherence between all the public transport modes and to make them easily accessible to everyone, e.g. through the launch of a unique brand for ALL public transport modes and the creation of one unique PT smartcard to facilitate intermodality and seamless travel in La Rochelle. The coherence between transport, land planning or parking policy was also important to ensure the success of the actions. To make this objective a reality, strong political support was also an essential driver for change, as well as effective consultation with all the stakeholders.





#### LJUBLJANA



# Why did your city take part in CIVITAS as demonstration city?

Because, like many cities, Ljubljana has to deal with congestion and air pollution, caused by traffic. We wanted to improve the situation and the CIVITAS Initiative seemed to be the right framework to learn from other cities and work with them.

# What are / were your keys to success within your CIVITAS demonstration city?

Our main keys to success were: a strong local partnership and political support, a strong partnership at project level, and sound project management.





# Why did your city take part in CIVITAS as demonstration city?

The City of Malmö has since the 1990s had the ambition of demonstrating sustainable urban development. Sustainable transport has always been an important part of this ambition, as was shown in the development of the Western Harbour and Augustenborg. Here, transport solutions, low emission zone

and measures for changing behaviour and attitudes were implemented early, and innovative techniques (electric cars, ethanol, CNG etc.) were demonstrated and implemented. The city saw the CIVITAS Initiative as a perfect opportunity to expand and intensify its work with sustainable transport by demonstrating a large variety of measures. The establishment of a local part-

nership to enhance private-public cooperation, the connection with other cities in Europe to share experiences and the close connection to the academic world were stimulating parts of the initiative.

# What are / were your keys to success within your CIVITAS demonstration city?

Several factors have been important to successfully bring forward the CIVITAS SMILE project in Malmö. The suggested measures were in line with the interests and plans of the local partners, thanks to a thorough and well-prepared application process. There was clear political support for the initiatives. Civil servants within the different departments worked in very close co-operation, and the overall management was clear and tight.



#### **NORWICH**

# Why did your city take part in CIVITAS as demonstration city?

Norwich took part as a CIVITAS demonstration city as it aspired to create a sustainable, safe, and flexible transport system that improved the quality of life for its citizens. In accordance with the CIVITAS "mission statement" it has learned and shared experiences with other cities and has actively disseminated information on planning, implementing and evaluating measures with cities aspiring to become future CIVITAS members. The legacy of Norwich CIVITAS measures have

demonstrated the value of cleaner, sustainable urban transport systems which have influenced policies of local and national government and endorsed the European Commission's Green Paper: "Towards a New Culture for Urban Mobility".

# What are / were your keys to success within your CIVITAS demonstration city?

The keys to success within our CIVI-TAS experience is the establishment of robust and committed transport planners, transport providers and other stakeholders to sustain and improve the opportunity of implementing such measures in order to evolve and develop them to meet current and future urban transport needs. Some measures have been adopted by other CIVITAS city measure projects where "best practice" has ensured their continuity and demonstrated the valuable networking opportunity of CIVITAS.





#### **ODENSE**

# Why did your city take part in CIVITAS as demonstration city?

Being a CIVITAS demonstration city has added great value to our long tradition of promoting soft modes through campaigns, citizens' involve-



ment and new concrete developments within the field of cycling and public transport. As a demonstration city, Odense also had the chance to try out unique measures to see if they were viable.

# What are / were your keys to success within your CIVITAS demonstration city?

Our main key to success was to implement measures which involved the citizens in our city, Odense. We had a great level of citizen involvement, which ensured ownership and the viability of the efforts.



#### **PLOIESTI**



# Why did your city take part in CIVITAS as demonstration city?

We considered that CIVITAS could be an opportunity for the City of Ploiesti to design and improve the urban development strategy in an integrated manner. It also provided the opportunity to be a part of a network that can provide the benefit of learning from other cities' experiences.

# What are / were your keys to success within your CIVITAS demonstration city?

The keys to success within our city were sharing the experiences of other cities within in the CIVITAS Network, establishing the best solutions according to the own specific local conditions and efficient planning of activities together with the adaptation in the initial plan to the unexpected factors and the commitment of the human resources involved.



## **POTENZA**

# Why did your city take part in CIVITAS as demonstration city?

Potenza is a small-sized town in Southern Italy with a local public transport system characterized by a diversified supply of urban transport modes (buses, escalators, elevators, light subway). In these last few years, a revolution was launched in order to solve critical urgencies with the system. This revolution focused on an innovative Strategic Mobility Project comprised of infrastructural (new roads and exchange nodes), structural (renovation of the urban fleet) and innovation (new technologies,

integrated ticketing system, innovative management systems) components with the objective of minimizing private car use and realizing a public transport system more efficient and attractive to users. To realize all these actions, Potenza needed a way to get in touch with other cities working on the improvement of their own transport systems thus exchanging experiences and innovative policies and strategies – CIVITAS gave the town an important opportunity to do this.

# What are / were your keys to success within your CIVITAS demonstration city?

Our CIVITAS project comprised of 4 demonstrative measures: clean buses, demand responsive transport, carpooling, and mobility management. The last measure, mobility management, in particular, enabled the town to address important governance actions, with stakeholder participation, thus reinforcing the ambitious project of a strategic design and a new environment of mobility. Therefore, CIVITAS became one of the main programs of the town that is still positively contributing to the encouragement of sustainable development and to the enhancement of competitiveness in the regional and interregional dimension.







#### **PRESTON**

# Why did your city take part in CIVITAS as demonstration city?

Preston is England's newest city - city status was granted in 2002. It has a population of 129,000 plus suburban areas in South Ribble (combined population 250,000). Preston is the administrative and largest commercial centre of Lancashire in the North-West of England. A key driver in taking part as a CIVITAS demonstration city was to build a local partnership to tackle transport issues in the area. Preston City Council, South Ribble Borough Council along with Lancashire County Council, as Transport Authority, and local transport operator Preston Bus developed this partnership to deliver the CIVITAS SUCCESS project and improve sustainable mobility.

# What are / were your keys to success within your CIVITAS demonstration city?

Partnering with La Rochelle and Ploiesti, we aimed to share experiences and knowledge to deliver an ambitious package of mobility and traffic management measures and through the wider CIVITAS Network we are able to share best practice from our own experiences and gather information to develop new and innovative transport solutions. Throughout the four year programme we developed may initiatives to deliver sustainable transport improvements in the area. These included a large programme of personalised travel planning which reduced single occupancy car trips in the area by over 13%, launched a

car pooling initiative, developed clear zones within the city and university area, improved railway station parking in South Ribble and increased the availability and quality of passenger transport information in the area. As well as these measures we have developed lasting relations with our partner organisations both at a political and officer level which will lead to further developments in planning sustainable transport initiatives in the future. Our experience has also enabled us to establish a CIVITAS UK & Ireland City Network that will promote the CIVITAS approach to implementing transport measures and will give other local authorities access to technical expertise and experience that we have developed.



### **STUTTGART**

# Why did your city take part in CIVITAS as demonstration city?

Based on our past experiences participating in projects supported by the European Union, Stuttgart expected to benefit from the exchange of information and experience with other European cities which is a key element of CIVITAS. Additionally, the strong focus on environmentally-friendly transport in CIVITAS supported Stuttgart in its own efforts to implement such a transport system, especially by linking private and public transport into an integrated transport system.



# What are / were your keys to success within your CIVITAS demonstration city?

The main driver for Stuttgart was the opportunity to exchange ideas and to promote ideas beyond national borders. This is particularly crucial for Stuttgart since it has a long tradition participating in several European and world-wide activities. Addition-

ally, CIVITAS offered the opportunity to implement integrated measures – integrated among several means of transport or integrated between several actors and/or stakeholders involved in the measure. CIVITAS closed the gap between different approaches that supported integrated solutions leading to a sustainable future of mobility.





## **SUCEAVA**

# Why did your city take part in CIVITAS as demonstration city?

The Suceava Municipality made the decision to take part in CIVITAS as a demonstration city after having gained experience with previous transport projects, albeit smaller actions and impacts. But CIVITAS offered the ability to learn how to address problems such as congestion, road safety or environmental pollution, as well as how to improve user services, promote intermodality and

access to information, and enhance safety and security aspects. Suceava city hall found, within the CIVITAS program, the opportunities to design personalized actions to be implemented for reaching the desired goals. The partnership of cities taking part in the same project was considered a good platform for consultation and exchange of good practice and ideas. That was regarded as being of great help at the moment that forthcoming actions were being planned.

# What are / were your keys to success within your CIVITAS demonstration city?

The main keys that led to implementing successful measures within the CIVITAS Initiative required good political support, good cooperation within the team members and tasks fulfilment, good preparation of the planned activities, expertise transfer, good support and advice received from all the consultants appointed to take part in the project development, evaluation, and dissemination activities. Furthermore involvement of the different groupings of citizens, in all instances (school teachers, pupils, employees of the public institutions, public transport users, etc) and the continuous evaluation of the actions, through data collection and corrective activities taken on the spot when necessary.





# Why did your city take part in CIVITAS as demonstration city?

To tackle local transport problems and develop new systems – congestion, pollution, road safety, mode shift, etc, to gain visibility through the CIVITAS Initiative – an honour to belong to CIVITAS Network family since 2004! To foster dialogue and improve efficiency – international projects are very dynamic, involving different counterparts from local municipality, state and Europe and a lifelong learning and continuous research – Tallinn

is committed to search for new/best solutions and to give local experts the possibility to exchange knowledge.

# What are / were your keys to success within your CIVITAS demonstration city?

Know-how gained from numerous CIVITAS workshops, summer universities and site visits, and furthermore the good cooperation with CIVITAS SMILE partner cities and new contacts among other CIVITAS cities were our keys to success.



# 

### **TOULOUSE**

# Why did your city take part in CIVITAS as demonstration city?

Firstly, Toulouse decided to commit to CIVITAS thanks to a strong political impulse. In fact, from 2003, the president of the regional Public Transport Authority desired to involve Tisséo and Toulouse in the European Urban Mobility scene. It started with a kind of joke: our President stated that he wanted European inhabitants to be able to find Toulouse on a European map. This political willingness to join the CIVITAS programme as demonstration city was part of a global renewal strategy of the authority in order to foster its modernisation and make possible for Tisséo to participate to an integrated urban transport policy. To accompany this rebuilding,

specialized staff were hired to prepare the CIVITAS call and also to manage the measures once initiated.

# What are / were your keys to success within your CIVITAS demonstration city?

Through our final Policy Recommendations work, developed at the project level, we have pointed out several success keys that seemed essential for success of CIVITAS at the local level. Taking into account, as a first prerequisite, the local context for implementing urban mobility policy, political participation throughout the life project and favourable local regulation remain one of the most crucial keys to success. Furthermore, the availability of financial means and an economic

logic is also important. The inclusion of a financial chapter in a sustainable urban mobility plan, covering infrastructure and soft measures and based on cost and benefit analysis, can shape favourable financial conditions for a new mobility culture. Without the willingness of a strong partnership composed by the local mobility stakeholders to cooperate effectively together and their commitment in favour of an alternative and sustainable mobility culture, the CIVITAS project would not have progressed at the Toulouse level. Citizens' involvement at the different steps of the measure implementation also represented a valuable approach to increase their participation and awareness, even in controversial measures such as paid parking.



#### VENEZIA

# Why did your city take part in CIVITAS as demonstration city?

Around the time of the CIVITAS call, the City of Venice and other local mobility actors were planning a series of ambitious single local mobility actions. Carrying out these actions in a coordinated, integrated manner within CIVITAS provided added value. By participating in a CIVITAS project, the city was automatically seen as a flagship in issues related to mobility and

energy efficiency. This is different than other, past projects. Those efforts may have been equally or even more positive for the local community, but they do not necessarily have the same promotional power for the City. CIVITAS is known as being stringent, demanding and rigorous; if a City participates, then it is guaranteed that positive, concrete actions are being implemented.

# What are / were your keys to success within your CIVITAS demonstration city?

CIVITAS has been successful in Venice as a result of a consolidated work-

ing group formed of all local partners involved in city mobility issues. Since the conception stage of the project, this working group, active since the conception of the project, has managed to pursue its objectives, share and solve problems, and then evaluate and communicate its successes.



Clear benefits for members: informing and being informed as regards policy, learning and funding.



# THE CIVITAS FORUM NETWORK

## A Family with Shared Visions

As we noted earlier in this section, CIVITAS is more than a research project among demonstration cities. It is a mechanism for cities to access and exchange information and to provide policy-level input to the European Commission. An effective and popular part of CIVITAS is the Forum Network.

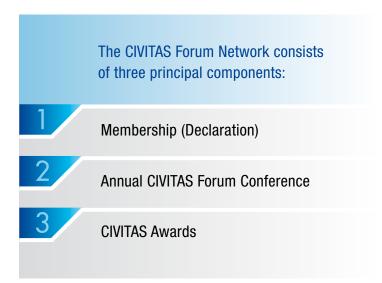
The CIVITAS Forum Network is a platform for the exchanges of experience and ideas related to sustainable urban transport. The Forum Network is comprised of all 58 cities within the three CIVITAS phases (CIVITAS I, CIVITAS II, and CIVITAS PLUS), but is open to all cities within Europe. It currently has some 181 members and growing. However, all members must demonstrate clear political commitment to better and cleaner urban transport for their cities.

#### **BENEFITS**

The CIVITAS Forum Network affords its members several clear benefits: informing and being informed as regards policy, learning and funding. Firstly, in policy formulation the CIVITAS Net-

work offers a common voice for cities to inform urban transport policy at the European level. This is the principle role of the Political Advisory Committee. It also allows cities to showcase their efforts and be eligible for awards recognizing best achievements. Second, the Network is, by definition, a place to learn and share experiences. This learning is accomplished both via peer comparisons to other cities with similar circumstances and through the extensive evaluations that are performed within CIVITAS. Finally, CIVITAS Forum Network cities are also made aware of future EU funding opportunities. But, as we will see as evidenced by talking to members of the Forum, perhaps the greatest benefit is simply being part of a "family" of professionals who share in the daily work of developing sustainable urban transport.





## Membership

As midyear of 2010, there were 181 members of the CIVITAS Forum Network, cities that are committed to clean and sustainable urban transport. The cities come from 28 countries (24 EU member states, plus Albania, Croatia, Macedonia and Switzerland) as shown in the list on page 30.

As such, over 100 cities that are not CIVITAS demonstration cities have decided to join the CIVITAS "family" by joining the Forum Network. Joining requires commitment. The CIVITAS Forum Network cities are required to demonstrate their political and technical commitment to introduce ambitious and integrated strategies aimed at better, cleaner urban transport.

Specifically, this means that the cities need to commit to two overall objectives:

 Achieve a significant change in modal split in favour of more sustainable transport modes, and  Follow an integrated approach, by addressing as many of the categories (discussed in next chapter) of CIVITAS instruments and measures as possible in their local policy.

The main idea here is that cities commit to undertaking a comprehensive, integrated approach to sustainable transport rather than disjointed or one-time experiments.

# CIVITAS FORUM NETWORK DECLARATION

This member commitment is a formal requirement of Forum membership, as stated in the CIVITAS Forum Network Declaration document. The document is signed by an elected official with executive powers. While non-binding, the Declaration is taken very seriously by the European Commission and standing members of the CIVITAS Forum Network because it assures that

The Declaration, as a prerequisite for membership, is a powerful tool to make sure that cities involved in the CIVITAS Forum Network share a common commitment to sustainable transport in cities.

participants are serious about changing the basic way that city transport is developed and delivered by creating new, clean and better options for travellers. The CIVITAS Forum Network Declaration involves two important commitments. First, the city commits to support the Network by not only introducing an ambitious, sustainable urban transport policy, but to support the aims of the overall CIVITAS Initiative and share their experiences by actively participating in the Forum. Second, the city commits to several specific aims: to increase the use of sustainable modes and clean fuelled vehicles, to create new partnerships to achieve these aims and to follow an integrated approach in doing so.

Cities are by no means told what is best for them in order to meet these aims. The Network provides guidance on a range of measures that can be tailored to their city. However, the Declaration, as a prerequisite for membership, is a powerful tool to make sure that cities involved in the CIVITAS Forum Network share a common commitment to sustainable transport in cities.

We asked several members of the CIVITAS Forum Network about how membership benefits them. We heard that access to a broad network of professionals who experience the same issues and hurdles is a great help to their day to day work. It provides a sense of legitimacy to the work being performed by staff within their cities. Being a member of the Forum Network is also a sort of entry into a family that helps and supports one another. One member said that he tends to give more time to Forum members than non-Forum members when he receives requests for information. Conversely he knows he has special access to many other cities. A member from another city, one that is relatively small in size and in a non-EU member state, said that being a member of the Forum provides a good way to structure the initiatives that they had already started into a common framework that is understood by the rest of Europe. In the end, we heard the same thing repeated as the greatest benefit of CIVITAS - the benefits of mutual learning. Access to other examples of the same things they are trying is both technically helpful, as well as professionally and politically supportive. The CIVITAS family is not a causal concept ... it is a feeling that permeates all CIVITAS activities.

#### The 181 CIVITAS Forum Network Member Cities

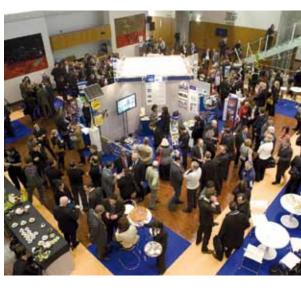
Status: 15/07/2010

	Status: 15/07/2010		
ALBANIA	Durres, Tirana		
AUSTRIA	Graz, Krems		
BELGIUM	Bruges, Brussels, Gent, Hasselt, Turnhout, Verviers		
BULGARIA	Bourgas, Gorna Oryahovitsa, Plovdiv, Sliven, Varna		
CROATIA	Biograd na Moru, Koprivnica, Rijeka, Zagreb		
CYPRUS	Nicosia		
CZECH REPUBLIC	Brno, Praha, Usti nad Labem		
DENMARK	Aalborg, Odense		
ESTONIA	Tallinn		
FINLAND	Lahti		
FRANCE	Brest, Chalon-sur-Saône, Clermont Ferrant, Grasse, La Rochelle, Lille, Nantes, Nice, Poitiers, Rennes, Strasbourg, Toulouse		
GERMANY	Berlin, Bremen, Dresden, Ingolstadt, Stuttgart		
GREECE	Athens, Hersonissos, Philippi, Region of Crete, Voula		
HUNGARY	Debrecen, Gyula, Györ, Miskolc, Pécs, Sopron, Szeged		
IRELAND	Cork, Dublin, Dun Laoghaire		
ITALY	Ancona, Bari, Bologna, Bolzano, Brescia, Cagliari, Cassino, Ferrara, Firenze, Genova, Giulianova, Gorizia, Lucca, L'Aquila, Milano, Modena, Monza, Naples, Parma, Perugia, Piacenza, Pineto, Potenza, Ravenna, Reggio Emilia, Roma, San Benedetto, Treviso, Venezia, Verona		
LATVIA	Riga		
LITHUANIA	Kaunas, Vilnius		
MACEDONIA	Skopje		
MALTA	Valletta		
POLAND	Elblag, Gdansk, Gdynia, Kalisz, Kraków, Mielec, Nowy Sacz, Poznan, Szczecin, Szczecinek, Warsaw		
PORTUGAL	Beja, Braga, Cascais, Coimbra, Faro, Funchal, Porto, Vila Nova de Gaia		
ROMANIA	Bucharest, Constanta, Craiova, Iasi, Ploiesti, Suceava		
SERBIA	Cuprija		
SLOVENIA	Ljubljana, Maribor, Nova Gorica		
SPAIN	Alcalá de Henares, Aranjuez-Madrid, Aviles, Barcelona, Bilbao, Burgos, Donostia - San Sebastián, Figueres, Gandia, Gijón, Gra- nada, Irún, Leon, Madrid, Palma De Mallorca, Ponferrada, Sevilla, Terrassa, Tudela, Vigo, Vitoria - Gasteiz, Zamora, Zaragoza		
SWEDEN	Göteborg, Lund, Malmö, Stockholm, Umea, Örebro		
SWITZERLAND	Geneva, Zurich		
THE NETHERLANDS	Eindhoven, Enschede, Haarlem, Rotterdam, The Hague, Utrecht		
TURKEY	Antalya, Sakarya		
UNITED KINGDOM	Bath, Belfast, Brighton & Hove, Bristol, Cardiff, Edinburgh, Gateshead, Glasgow, Leicester, London Borough of Bromley, London Borough of Hammersmith & Fulham, London Borough of Sutton, Newcastle upon Tyne, Northampton, Norwich, Plymouth, Preston, Reading, Suffolk, Winchester		









## **CIVITAS Forum Conference**

Within the CIVITAS projects, meetings are held throughout their duration, culminating in a final conference.

For CIVITAS II, this final conference was held in Toulouse in early 2009. However, the experience and information gained from demonstration cities lasts well beyond the CIVITAS projects themselves. In order to provide an ongoing dialogue for the evolution of sustainable urban transport in Europe, members of the CIVITAS Forum Network gather together at an annual conference – the CIVITAS Forum Conference, which will continue in CIVITAS PLUS.

The CIVITAS Forum Conferences allow host cities to showcase their innovations in sustainable urban transport and to enable the elected officials who committed to clean and better transport to participate in a celebration of their hard work. Participants at the Forum Conference come from

CIVITAS Forum Network cities and there is no registration fee, encouraging maximum involvement and helping to encourage attendance.

Like any other conference, the CIVITAS Forum Conference includes presentations by cities that have planned and implemented innovative measures. It also includes presentations by top-level representatives of the European Commission, national and local officials and keynote speakers with considerable experience in sustainable transport. However, perhaps the greatest aspect of the Forum Conference is the ample opportunities to network and share information. Public areas are full of displays on CIVITAS demonstration cities as well as on products and services that support sustainable transport in cities. Participants consistently note this aspect of the conference in their evaluations, the ability to catch up with colleagues and meet new attendees.

During CIVITAS II, four annual CIVITAS Forum Conferences were held in the autumn of each year. The locations and conference themes are listed below:

#### Burgos, Spain (2006)

"Cities in Motion: Toward a New Role for Cities in European Transport Policy"

#### Kaunas, Lithuania (2007)

"Urban Mobility: Putting Cities and Citizens in Driving Seat"

#### Bologna, Italy (2008)

"Cities and Mobility: Change is Possible"

#### Kraków, Poland (2009)

"The Future of Urban Mobility"













# What Has Hosting the Forum Conference Meant to Cities?

We sat down with the principal organisers of each of the four CIVITAS Forum Conferences to ask them what hosting the event has meant to their cities and to them personally.

#### The conference organisers included:



**José María Diez,** City of Burgos



**James McGeever,**City of Kaunas (formerly)



**Fabio Cartolano,** City of Bologna



**Tomasz Zwoliński,** City of Kraków

#### First, we asked: "what has hosting a CIVITAS Forum Conference meant to your city?"

In Burgos, hosting the first conference within CIVITAS II meant that the elected local leaders accelerated their work so that measures could be in place in time for the Forum Conference, earlier than other project cities. Being host to high-level officials from the European Commission also helped to further initiatives of import to the host city by garnering more local political support. Hosting has had a lasting impact beyond the event. It seems to encourage political stakeholders to try more ambitious activities. It helps local stakeholders understand that clean and better transport is not just a technical solution, but is equally a policy statement about how cities should look, feel and operate. In Bologna, the legacy of the Forum Conference has allowed city staff to convince new incoming politicians of the merits of their sustainable transport policies.

#### We also asked what involvement in CIVITAS meant to them personally.

Of course, we heard again of the many new friends and acquaintances made within the CIVITAS family, from all over Europe and the world. But two of the conference hosts mentioned that CIVITAS provided them with a new career, having not been involved in urban transport prior to being hired by their cities. Others mentioned the benefit of CIVITAS involvement helping their overall organisational and managerial skills given the need to deal with complex, integrated efforts. One of the hosts said that CIVITAS had allowed his professional dreams to come true!



## **CIVITAS Awards**

#### At each year's Forum Conference, a gala dinner is held to honour the winners of the CIVITAS Awards.

Three awards are handed out, one for a CIVITAS demonstration city (participating in CIVITAS project), one for a CIVITAS Forum Network member that is not a demonstration city, and the prestigious CIVITAS City of the Year Award. The City of the Year is thought of as CIVITAS' best ambassador – a city that embraces and embodies the CIVITAS Initiative philosophy. It is a city that involves all local stakeholders and shares its experiences with the rest of Europe.

We talked to representatives of Burgos and Graz to better understand what winning the City of the Year Award has meant to them and their city. They both cited the ability to acknowledge and reward the elected officials who supported cleaner and better urban transport policies in their cities. One award recipient said, it "made the political bosses very happy."

Being recognised as best among cities throughout Europe provides a level of legitimacy to their efforts that local recognition alone cannot provide. It is also helpful to be able to show that many cities have tried the same measures; that your efforts are innovative, but not unique. Many politicians do not want to be the first to try something new. One winner said that his elected officials are now more trusting that what they are doing can be successful.

Finally, the Award may also have had a positive influence on the citizens of the award-winning cities. One recipient said that citizens may take for granted the good travel choices they enjoy and this highlights how fortunate they are with better transport.

CIVITAS City of Year winners 2006 – 2009



2006: Malmö, Sweden



2007: Burgos, Spain



2008: Graz, Austria



2009: Nantes, France

So how does involvement in CIVITAS
Forum Network and the Political Advisory
Committee help cities realize their sustainable transport vision? We can learn from
the experience of Kaunas, as provided
by their CIVITAS local manager.



# THE CITY OF KAUNAS -

# A ROLE MODEL OF INTEGRATION

By James McGeever formerly with the City of Kaunas



The City of Kaunas, Lithuania, was one of the pioneer cities in CIVITAS I (2002–2006), joining the partner cities of Aalborg, Bremen, Bristol and Nantes in the CIVITAS VIVALDI project. Being part of the CIVITAS Initiative was a massive jump into European partnerships for Kaunas and the biggest EU partnership project it had been involved in up to that date.

What was happening on a European level within sustainable transport was

not yet on the agenda in Kaunas at the start of joining the CIVITAS programme Therefore it was very important to have a "European" voice during the early years of EU membership for the City of Kaunas (and Lithuania) and so from a practical and professional point of view, Kaunas gained immensely from its membership of the CIVITAS Forum.

Also, through the election of a city councillor to the CIVITAS Political Advisory Committee (PAC), the City was able to add input and comments to a range of policy, and green papers on sustainable urban mobility issues and in the process to put forward specific comments related to issues facing cities in the EU New Member States.

For Kaunas this made a big difference because New Member States had a quite different set of circumstances, issues, and problems to those faced by established member states. Through CIVITAS PAC involvement and the hosting of the CIVITAS Forum Conference 2007, the City of Kaunas was able to show politicians how accessible the political process is and how easy it is to actively contribute to European policy.

By the end of the CIVITAS VIVALDI project, Kaunas was well versed in much of what was happening across Europe in sustainable transport. Polit-











Th

ical support for new, connected, and continuation projects was easier to harness because politicians had been able to clearly see the effects (and benefits) of the CIVITAS measures and this certainly had an influence on the city's success in delivering EU structural funds and ERBD (European Bank for Reconstruction and Development) applications as well as enjoying political (and therefore financial) commitment, energy and motivation to join consortia applying for INTERREG (the European Territorial Co-operation financed by the European Regional Development Fund) and other EU-based programmes and projects.

We can say that CIVITAS provided a real opportunity to get to know a lot more about European achievements within sustainable transport and mobility management. It was a great to see the work of other cities in order to gauge what we in Kaunas were doing and what we could be doing more of. Looking around other European cities made me realise that actually Kaunas had a lot of very good, positive efforts being developed and in place already. For example, the city's public transport system at the time was ex-

Through CIVITAS
PAC involvement
and the hosting of
the CIVITAS Forum
Conference 2007,
the City of Kaunas
was able to show
politicians how accessible the political
process is and how
easy it is to actively
contribute to European policy.

"

tremely popular with over 65 percent of the modal split and it was therefore important to try to build upon what we knew we could do well and to have the project funds to support us in these activities and others. This in turn gave the technical staff the confidence and added competence to make our measures within CIVITAS

VIVALDI successful ones.

There was (and still is of course) an informal network of mentors and experts from CIVITAS partners that could be relied upon to help and assist with some particularly tricky technical issues concerning new initiatives and practices; this also added confidence to our team and efficiency to the delivery of our measures.

The establishment of a real network of cities all working on a single aim: to make cities cleaner, greener, safer, and easier places to travel and live in is also a great pan-European achievement from CIVITAS; a network of cities that have helped each other (as well as those outside the CIVI-TAS network) to strengthen efforts to improve sustainable urban mobility initiatives. Cities have managed to do this through a regular exchange of best practice across a wide range of European cities; each with a very different cultural, social and political environment. It has provided a true European sustainable urban mobility community of like-minded individuals, organisations, and institutions all with a common aim.

The story of how CIVITAS became a "brand."



# CIVITAS: A BRAND IDENTITY FOR SUSTAINABLE URBAN TRANSPORT

# CIVITAS – A Lighthouse for EU Sustainable Urban Mobility

The CIVITAS Initiative has made a very conscious effort to create an identify for itself as synonymous with cleaner and better transport in cities. In fact, it is now really an EU symbol for sustainable urban mobility. How was this achieved? This section tells the story of how CIVITAS became a "brand."

Most European cities suffer from similar problems related to traffic congestion. They usually try to find solutions within their own city administration or with support from know-how within the region. But, there is often limited awareness that significant European know-how exists that can help tackle the problems. As such, there is a demand for a lighthouse in the world of sustainable mobility solutions.

This was the basis for the CIVITAS branding strategy. The CIVITAS brand was born after the first phase of CIVITAS projects was already finalised. It was realised that even the people who had worked for more than four years on CIVITAS I projects didn't necessarily know about the CIVITAS Initiative, because they knew only the acronyms associated with their projects (such as TELLUS or MIRACLES).

Some marketers have attempted to define the term "brand:" David F. D'Alessandro concludes that:

#### "

"A brand is more than just advertising and marketing. It is nothing less that everything anyone thinks of when they see your logo or hear your name."

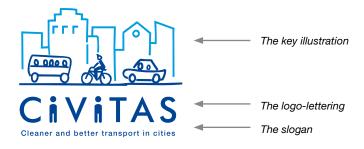
#### "

In the marketing world it is widely known that a brand is only as strong as its anchor within an organisation and when its core values are internalised by staff. For CIVITAS, this realisation meant that it made no sense to put the brand "in the store window" before all the CIVITAS actors identified themselves with the CIVITAS brand and its core values. Therefore, the main target group of the branding activities were all persons (about 400) who worked in the CIVITAS projects and who planned and implemented activities in cities. A three-day introductory event, held at the beginning of CIVITAS II fostered the CIVITAS "family", thereby establishing the CIVITAS brand. The intention was that this group talk to other stakeholders in their own city in order to create a multiplier effect to disseminate CIVITAS ideas and approaches. There was also insufficient budget for developing a broad campaign that would make the brand visible to all potential consumers of CIVITAS knowledge. The lack of money for a big branding campaign prompted the decision to start with internal branding - that is developing a "programme" level identity, as opposed to an exclusive project level identity.

### And ... It Was Successful!

A very important element of the CIVITAS brand is its corporate design. It contains four critical elements: the slogan, the logo-lettering, the key illustration and the key image. The logo-lettering contains simplified person characters in order to point out that CIVITAS is an initiative for people. The key illustration contains all modes of travel in front of a skyline to underline that CIVITAS is an urban initiative. The fact that pedestrians are missing in the illustration creates the key image that reflects the dynamic of the action. The colours, marine blue and silver-grey, underline the core values as serious and goal-orientated. In new messages and products, the colour green has also been used.

#### Criterial elements of the CIVITAS corporate design:





The logo version for front covers of printed publications:

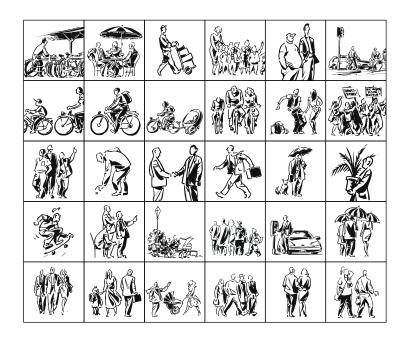


#### **CIVITAS BRAND IN PRACTICE:**

Examples of implementations

- > To open the window for creativity, the brand design also contains the liberal use of illustrations.
- The corporate design was applied to all products that are CIVITAS related, such as the CIVITAS stand, affinity products, all written materials and presentations.
- → A special focus was placed on the connection between the CIVITAS brand and the demonstration cities. Every city got its own CIVITAS design that integrated the name of the city into the CIVITAS logo.
- > This approach, combining the CIVITAS logo and city name, was very successful. Cities widely embraced the CIVITAS brand and used it extensively in their internal communication. They also used it for public communication to their citizens, e.g. as design on busses, tramways, and at bollards. Likewise, projects were required to use their name in a way that CIVITAS was part of their logo.
- In these ways, everything related to CIVITAS, or using the CIVITAS name, is immediately recognisable as part of CIVITAS. Another important element of branding, of course, is accessibility to and by anyone via the CIVITAS website. The website contains all projects, cities, measures, events, news and the contact information on the members of the CIVITAS "family". It works as a onestop shop for those interested in CIVI-TAS and sustainable urban transport.









Quality-orientated Focus on citizens

Serious

Urban

Sustainable

 $\rightarrow$ Committed

Integrated

Trend setting

Liveable





















# CIVITAS BRAND AND THE "WORKING" FAMILY

We asked CIVITAS participants to tell us what the CIVITAS brand meant to them. While many cities provided positive comments, one stood out. CIVITAS managers in Venice encapsulated the value of the CIVITAS brand thusly:

"We have found the CIVITAS brand valuable as it has gained a good reputation over the years. By participating in a CIVITAS project, the city is automatically seen as a flagship on issues of mobility and energy efficiency. This is what is different to other projects. They may be equally or even more positive for the local community, but other projects do not necessarily have the same promotional power for the city. CIVITAS is known as being stringent, demanding and rigorous, if a city participates it is a guarantee that positive concrete actions are being carried out." Jane Wallace-Jones, Venezia

Anu Leisner from Tallinn summed it up very succinctly:

"I think the CIVITAS brand is professional and friendly at the same time."





# THE EIGHT BUILDING BLOCKS OF AN INTEGRATED STRATEGY

 $\rightarrow$ 

The keystone to implementing cleaner and better transport in cities is developing integrated packages of strategies that can best meet local objectives for sustainable mobility. CIVITAS provides a framework for the consideration of the right measures for the right circumstances. These are called the "building blocks" which are the raw materials for creating a new mobility culture.

The information used in this chapter is derived from many sources. Each city reported its own experiences and the four projects (CARAVEL, MOBILIS, SMILE and SUCCES) summarised the findings in a final project brochure or report. As mentioned in chapter 1, CIVITAS II also utilised independent evaluation under the CIVITAS GUARD effort that involved both impact evaluation (what were the results?) and process evaluation (what contributed to the success of each measure?). An overall summary of results, in the form of "facts and figures" are presented in chapter 3.

1



2



3



# CLEAN FUELS AND VEHICLES

Creating travel options that utilise cleaner, more fuel efficient vehicles and alternative fuels

> Page 42

# INTEGRATED PRICING STRATEGIES

Managing travel demand via incentives (integrated public transport ticketing), disincentives (pricing) and regulations on fees

> Page 45



Finding new ways to get around the city, including car pooling, car sharing, cycling and walking

> Page 49

4



#### **SOFT MEASURES**

Influencing travel behaviour through mobility management, including communications, partnerships, and education

> Page 53



(www.civitas.eu/measure\_fields)

5



#### **ACCESS RESTRICTIONS**

Developing safe and secure roads for all users and managing parking

> Page 56

6



7



8



# COLLECTIVE PASSENGER TRANSPORT

Improving the quality and efficiency of public transport and better integration with other modes

> Page 60

# URBAN GOODS TRANSPORT

Promoting energy-efficient freight logistics and new methods for goods distribution that contribute to better overall urban transport

> Page 64

# TRANSPORT MANAGEMENT

Improving traffic conditions through better coordination, traveller information and the use of technology

> Page 67

Each of these measure clusters, or building blocks, are discussed in the sections that follow. For each cluster, we define the category of measures included within, describe how their were implemented in CIVITAS II, discuss what seems to work well, what was expected to work better, how to overcome barriers identified through the demonstration projects, and what was the key to policy adoption or political support. A "final thought" concludes each section.

Creating travel options that use utilise cleaner, more fuel efficient vehicles and alternative fuels



# **CLEAN FUELS** AND VEHICLES

# Integrating cleaner vehicles into urban transport

In seeking to encourage cleaner and better transport, most CIVITAS Il cities included the use of clean vehicle and clean fuels in their integrated strategies. The implementation of cleaner vehicles decreases air pollution, reducing the harmful effects from vehicle emissions and, in so doing, improving the quality of life for the citizens. On a longer-term perspective, the implementation of biodiesel or biogas vehicles can lead to greater energy independence (from fossil fuels) and relief from unstable oil prices.

In CIVITAS II, the principle activity involved the procurement and integration of clean fuel buses into their public transport fleets, but also involved some other innovative measures with clean vehicles. In Venice, clean public transport pilot vessels were introduced. In Malmö, part of the city's fleet of cars and light duty vehicles was converted to clean fuels, a local hospital was convinced to purchase cleaner vehicles, and trucking companies were enticed to switch to cleaner engines (and provided eco-drivers training). Clean fuel vehicles (CNG, Biofuel, LPG, etc.) were only part of the story. Some cities tested electric and hybrid electric buses, such as La Rochelle's park-and-ride minibuses.

Promotion of these efforts was an integral part of the strategy, with the fact that the bus was a clean fuel vehicle prominently displayed. In conjunction with this, marketing and education efforts were coordinated with the introduction of these cleaner vehicles to raise awareness of the benefits and encourage citizens to consider getting a clean fuel vehicle.

In some cities, the supply infrastructure for these fuels, including the recycling of cooking oil (in La Rochelle) was an important function as well. Assuring a reliable supply chain for clean fuels was an important part of the efforts in places like Burgos and Norwich for CNG and biodiesel.







In Burgos, the percentage of the population that were aware of the use of biofuels in the public transport fleet rose from 13 % to 74 % during the project

Overall, CIVITAS contributed to the introduction of 144 biodiesel (new or modified) vehicles, including 10 boats. Furthermore, 123 CNG (Compressed Natural Gas), 55 LPG (Liquefied Natural Gas) and 21 electric vehicles were deployed. Some 72 EEVs (Enhanced Environmentally-friendly Vehicle) and 4 hybrid buses were also procured. In addition, 20 biogas trucks were introduced, 30 vehicles were fitted with soot filters and 85 taxis have been converted to LPG. The CIVITAS activities have contributed significantly to the substantial growth in the public and private purchase of clean vehicles in European cities. More importantly, the attitudinal changes brought about by the measures are likely to stimulate the market for such vehicles and form a virtuous circle of increasing supply and demand.

#### WHAT WORKED WELL?

The introduction of clean fuels and vehicles has an obvious positive environmental impact. These fuels and the engine technology produce significant reductions in NO<sub>x</sub>, HC, CO, CO<sub>2</sub> and fine particulate matter. However, the cleaner vehicles can be more economical in some cases and use resources

that might otherwise be wasted. The use of LPG in taxis in Suceava was found to be economically very worthwhile and provided significant CO, savings where deployed. The generation of biofuels from waste such as cooking oil, water treatment or waste food can provide a worthwhile and cost effective contribution to environmental sustainability by powering vehicle fleets based at depots close to the fuel source. Such measures are well received by the public (up to 90 % support) and can be very beneficial more widely, by raising awareness of sustainable vehicles.

# WHAT WAS EXPECTED TO WORK BETTER?

Not totally unexpectedly, the purchase price and maintenance cost of clean technology is higher than for conventional vehicles. In some cases, the maintenance costs were significantly higher due to the specialised nature of the fuels and technology to use them. Significant technical competence is needed to deliver a biofuel product, particularly oil, to a reliably acceptable standard. One overall barrier to the broader adoption of clean fuels is the availability of sufficient quantity and

Compared to conventional diesel engines the following reductions of pollutant emissions were achieved:

- → EEV buses emit up to 98 % less CO, up to 68 % less NO<sub>x</sub> and up to 89 % less particulate matter.
- → Biodiesel emits 50 80 % less CO₂ and up to 50 % less particulate matter.
- → Biogas vehicles emit up to 70 % less CO₂, up to 78 % less NO₂ and around 86 % less small particulate matter. Furthermore, these vehicles are less noisy.
- → CNG buses emit up to 91 % less particulate matter, but are less fuel efficient. However, this technology is regarded as very mature for use in public transport on a wider scale.
- → LPG buses emit up to 30 % less CO, up to 83 % less NO<sub>x</sub>, however the CO<sub>2</sub> emissions are about 10 % higher







quality of these energy sources to sustain their use in many urban areas. Upgrading fleets is one thing – but assuring that the fuel is readily available and convenient is a significant concern. Sometimes, the ability to procure clean vehicles was a challenge, with a few cities unable to take delivery during the pilot period due to unreliable suppliers.

# HOW CAN BARRIERS BE OVERCOME?

The uptake of cleaner vehicles into the urban environment is a broadly supported and worthy endeavour. However, the ability to create a reliable supply line and issues with the technical complexity of the fuel processes and

The relative attractiveness of fuel alternatives depends on issues of taxation, reliability of supply, technical competence to deal with all aspects of the fuel and its implications for engines, and regulations.

technology can create substantial barriers. Employing experts early in the process to guide locals through these potential pitfalls is a must. A thorough understanding of the regulatory framework for fuels, distribution, storage, etc. needs to be carefully monitored throughout the life of the project.

### WHAT IS THE KEY TO POLICY ADOPTION?

The relative attractiveness of fuel alternatives depends on issues of taxation, reliability of supply, technical competence to deal with all aspects of the fuel and its implications for engines, and regulations. These are critical issues to be addressed at national and European levels, particularly as environmental improvements from the introduction of clean vehicles and fuels have cost implications, which may become more significant in an increasingly financially constrained environment. Experience in CIVITAS II cities revealed that localities with firmly established environmental targets (e.g. CO, reductions) had an easier time integrating cleaner vehicles into their fleets, coupled with a supportive public transport constituency.

#### **FINAL THOUGHT**

### Setting a good example

Introducing or expanding the use of clean vehicles and clean fuels in the urban transport system is not always an easy task. Costs are sometimes higher than expected. The suppliers of the technology and supply system for fuel can be unreliable. The need to maintain the vehicles can create new challenges. However, cities can set a very positive precedence by adopting and heavily promoting cleaner transport. This gets citizens and visitors more aware of the environmental consequences of travel and the availability of cleaner alternatives. In a very simple way of thinking ... highlighting clean alternatives to the gasoline powered car points to the negative aspects of this "dirtier" mode of getting around. Most people have no idea of the amount of harmful emissions eminating from their tailpipe. Clean buses, the availability of clean fuels, and innovative reuse of products (biofuels) get people to realise, there is another wav!

Managing travel demand via incentives (integrated public transport ticketing), disincentives (pricing) and regulations on fees.



# INTEGRATED PRICING STRATEGIES

# Incentivizing the Use of Cleaner and Better Transport



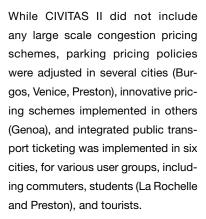
Most experts agree that the most effective way to get people to change their travel behaviour is to work via their wallet or purse. Thus, pricing is often used to even the out-of-pocket costs of using various means to travel, or at least change the perceptions about how much an option costs.

For example, people might be given a financial incentive to try a new, cleaner mode of travel. This might involve a free bus ticket on a new service or a gift certificate for using a sustainable mode for a certain number of days per month. On the other side of the proverbial coin, disincentives can be used to make the car a little less appealing. This could include congestion charging, of the type implemented in the center of London or Stockholm. Or it could be a little more indirect, such as influencing the price and availability of parking in congested areas. In other cases, certain types of vehicles are made to pay a fee to access certain areas.

In Burgos, rationalised parking pricing policies efficiently moved more cars to offstreet locations, reducing the time and effort people spent searching for on-street parking. Some 4,000 km of travel was eliminated from this reduction in "cruising" for parking.



# Pricing Measures In CIVITAS II



The parking pricing measures generally involve a "rationalisation" of parking policies for various user groups (residents, shoppers, commuters, etc.) and the use of differentiated price of on- and off-street parking to reduce traffic in congested areas. In Burgos, a comprehensive strategy was developed among all relevant stakeholders to start charging for on-street spaces and move cars to off-street locations. This had an immediate impact as the number of illegally parked vehicles (cars and trucks) was reduced by 2,000 per day. In a dense, historic city centre such as Burgos, removing this many vehicles

had a noticeable positive impact on the streetscape. Parking pricing was explored in the town of Leyland, near Preston, to free up parking around the rail station, making park-and-ride more accessible.

In Genoa, a very innovative "pricing" scheme was designed for freight hauliers and deliver vehicles. Rather than charging each vehicle as it entered the restricted zone (BLUAREA), mobility credits are provided to businesses within the zone that can be spent on access rights to delivery vehicles. The name given to the mobility credit system is "mercurio" which is the Roman god of commerce. The amount of credit provided is based on their requirements and additional credits could be purchased if needed. This economic rationing system provided an economic incentive to manage deliveries and did so in a way that would not be as draconian as an outright fee. Residents, on the other hand, did need to buy a parking permit if they lived within the BLUAREA zone, but the annual fee for the first



car was quite low (EUR 50) and much higher for additional cars (EUR 300). Non-residents pay EUR 2 per hour to travel within the zone.

The cities that implemented integrated fare systems really did so to make public transport use more convenient and therefore increase its overall use. The objective was not to make more revenue, per se, as revenue and administrative cost considerations mitigated any revenue aims. Likewise, an integrated ticket was not always cheaper than separate tickets. However, the time and "hassle" savings in having one ticket is often perceived as a monetary incentive.

Making public transport more convenient via integrated ticketing, or use of smart cards, was an integral part of overall plans to increase the use of this sustainable mode. In La Rochelle, a tourist pass was developed to combine mobility and entrance to attractions. Convenience was also improved through e-ticketing, the ability to buy or add value to tickets or passes, as was offered to school travellers in La Rochelle. Over 80 % of users of these integrated fare media in La Rochelle are happy with the new passes and the conveniences they offer.

#### WHAT WORKED WELL?

The success of parking pricing and integrated ticketing schemes was attributable to two things. Of course, as stated earlier, influencing traveller's out of pocket costs is an obvious driver. However, the notion that these disincentives and incentives were well integrated into carefully thought out packages, along with information, education, enhanced travel options, traffic management, etc, made them far more effective and more importantly, more palatable to policy-makers, as well as the users themselves.

Parking pricing was an important part of efforts in Genoa, Burgos, and Venice to better manage traffic and influence mode shift to more sustainable options. In Genoa, the BLUA-REA scheme has had some positive, measurable results. The number of vehicles in the limited traffic zone has decreased by over 12%, thus removing over 7,000 cars per day (a result of the many related initiatives implemented in Genoa). Traffic accessing the zone has been reduced by 5%, parking availability has been improved by almost 7 % (and 22 % for motorbikes) and public transport use has been increased by 3%.

Integrated public transport tickets provided considerable convenience and were well liked among users. In Kraków, an integrated ticket between national rail and city transport resulted in a 15% increase in this type of public transport trip, although some of this may have come from regional bus lines that were not integrated into the fare system. In Toulouse, a new smart card, the Pastel card, was launched to integrate various public transport services, and the card is now used by one in three riders. However, the full impact of these new payment schemes may be realised after the completion of the CIVITAS work as impacts on ridership and revenue were difficult to assess immediately upon implementation (and in some cases, full deployment was delayed until after CIVITAS).



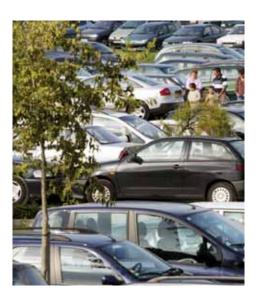


In La Rochelle, a tourist pass was developed to combine mobility and entrance to attractions. Over 80 % of users of these integrated fare media are happy with the conveniences they offer.

# WHAT WAS EXPECTED TO WORK BETTER?

Some technical glitches were experienced with integrated ticketing on public transport, especially with new smart card technologies. This impacted the willingness of test users to embrace the new card and fully appreciate its potential convenience. Likewise, some new parking payment and information systems experience technical difficulties. Overall, this points to the need to employ skilled technicians to foresee and correct such issues and a schedule and budget that includes contingencies, given the use of new technologies.

ing efforts. Public acceptance of the Genoa BLUAREA scheme improved considerably over time and some of this is attributable to the fact that integrated parking, permitting, and crediting scheme seemed less onerous than full cordon pricing, such as Stockholm or London. Integrated public transport ticketing, on the other hand, is very well received by potential users, but can run into opposition from various operators who fear loss of revenue or control. Ironing out all the inter-agency details ahead of time is a key to adoption of this measure.



# HOW CAN BARRIERS BE OVERCOME?

While important for all innovative measures, early, extensive and inclusive stakeholder discussions and public involvement is absolutely crucial with parking strategies, especially those that might reduce supply and/or increase the price. Softening of opposition to these measures, over the course of CIVITAS II, is testament to the effectiveness of real dialog. Likewise, the need to work with prospective users of new fare media is crucial to the creation of truly desirable tickets and passes.

# WHAT IS THE KEY TO POLICY ADOPTION?

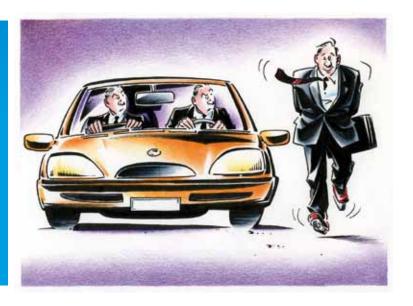
Parking can be a very politically-charged issue, with citizens and their elected representatives. In Burgos, over 80 % of residents from outside the centre (e.g. parkers) did not like the new parking regime. The ability to carefully consider the needs of residents, to assure that quality travel options existed, and education on the benefits of parking management were all crucial to the success of these pric-

#### **FINAL THOUGHT**

# Can we overcome the perceived convenience and low cost of driving?

Changing people's perceptions about the convenience and cost of driving is a difficult task for any city. And, the car has its rightful place in our lives. However, by making sustainable travel options better value and more convenient, people are willing to try these options for some of their travel. This is where integrated public transport ticketing can help overcome one perceived barrier about the need to pay a new fare every time they board a bus or rail. But we can also make using our car a little more inconvenient when it is to places or during times when there is really limited space for it. Parking pricing is a very effective means of influencing car use, albeit it can be highly controversial. At a minimum, making public transport more convenient and parking less convenient, via financial incentives, disincentives, and rationalisation, gets people to think about their travel habits and whether there is a better way!

Finding new ways to get around the city, including car pooling, car sharing, cycling and walking



# LESS CAR INTENSIVE LIFESTYLE

### Share the car ... or go on two wheels!

One cluster of measures featured in some CIVITAS II cities was focused on more innovative and sustainable uses of the car. While much of CIVITAS sought to shift travellers out of their cars and onto public transport, this cluster of measures sought to make more sustainable use of the car and non-motorized modes. This was accomplished in three principle ways: car pooling, car sharing and bicycling (and to a lesser extent, walking).

**Car pooling** involves sharing rides among two or more travellers in the same vehicle headed for the same destination. Car pooling can be facilitated by organised "matching" services, but the shared rides themselves are very informal.

**Car sharing,** on the other hand, involves sharing cars among a group of people that do not necessarily need daily use of a car or do not need a second car. Car sharing is a more formal arrangement ... sort of a membership club for short-term car rental, with the vehicles parked nearby.

Sharing vehicles has several benefits. For travellers, money is saved by sharing rides and vehicles. For cities, fewer cars on the road has obvious benefits. For employers, car pooling can reduce parking needs on-site. Finally, car sharing and car pooling can reduce overall parking needs in parts of the city with limited parking.

**Cycling and walking,** sometime called non-motorized or active transport, is both economical and very healthy. However, in an urban setting, cyclists and walkers must feel safe when using these modes.



Over 3,150 people started to use the car pooling services that were developed within CIVITAS II.



Keith Whitmore

# Car pooling, Car sharing and Cycling in CIVITAS II

Eight of the 17 CIVITAS II cities implemented car pooling schemes and eight implemented car sharing services (with Kraków, Toulouse, Norwich and Preston doing both). Car pooling was largely targeted at commuters as these trips are regular and involve common destinations and times. However, several cities tested car pooling for other groups, such as university students (Debrecen) and attendee of large events (Stuttgart). Most car pooling efforts included the introduction of a computerised ridematching service whereby commuters or other travellers could seek others with similar travel habits. In most cases, this was a new service, but in a few cities, upgrades to existing car pool matching software programs was made as part of CIVITAS. Of course, marketing efforts were employed to direct prospective drivers and riders to the matching service.

Car sharing involved the same two distinctions – some cities imple-

mented new car sharing services and other expanded existing programs, upgraded services, or introduced new vehicles. In Malmö, clean fuel car share vehicles were used and in La Rochelle, electric vehicles were deployed. In Genoa, car share vehicles were made available for mobility-impaired travellers (to accommodate wheelchairs, etc.)

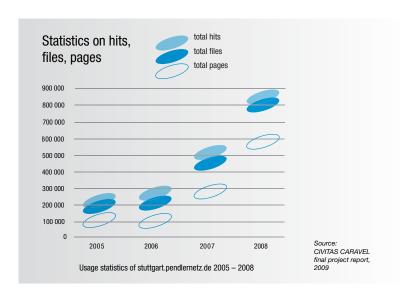
Cycling measures were implemented by 10 of the 17 CIVITAS II cities. Some of these measures were targeted to pedestrians as well. The measures included cycling infrastructure, such as cycle paths in six cities and cycle parking in four cities. Bicycle route information was added to the regional on-line travel planner by Malmö. Bike-on-bus schemes were implemented in Kraków and La Rochelle. Bike sharing schemes, similar to car sharing, were implemented in four cities, totally 266 bike rental locations offering some 2,400 bikes. Finally, measures to improve

cyclist and pedestrian safety, especially for children, was implemented in five cities.

The process evaluation revealed a very interesting relationship between cities with high starting cycle use and the success of CIVITAS measures. Cities that had a high starting share of travel by bicycle tended to have the greatest success in successfully implementing CIVITAS measures. In other words, cities that already placed a high priority on cleaner, better transport in the form of cycling had greater success in implementing other measures and realizing positive results – the new mobility culture was already alive in these cities.

#### WHAT WORKED WELL?

Car pooling and car sharing served rather specialised niches. First, these options provided a means for people unable or unwilling to switch to nonauto modes to save money or embrace more sustainable travel habits.





Therefore, one could use a car in a smarter way. Second, these shared car arrangements provided a practical way for people without access to a car to join those with a car. Car pooling offered a new option for students or those attending events. Car sharing allowed people to use a car only when absolutely needed.

The main enabler of these arrangements is the technology to match peoples' travel needs and available vehicles. This involves the software to match drivers and riders or make reservations for shared vehicles. In some cases, such as in Stuttgart, CIVITAS allowed for the updating of older matching software to make it more user-friendly and accessible.

The impact of the new and improved shared vehicle services was varied. In some cases, demand for the services was relatively low, such as in Debrecen where 68 students were registered. But in Stuttgart and Toulouse, car pool matching services were updated, expanded and better linked to public transit services, increasing registered users by 30 % (1,700 registrants) in Stuttgart and almost 250 % in Toulouse.

Car sharing efforts resulted in 143 new vehicles being added to car sharing fleets. As noted above, some of these vehicles were clean fuel (Venice – increasing the clean car share fleet to 45%). The emphasis on using alternative fuel vehicles for many of the car share fleets delivered significant energy (fuel economy) and environmental (pollution reduction) benefits, in some cases even up to monthly carbon emissions reductions of 42%.

Across the measures related to cycle infrastructure, a total of 60 km of extra cycle lanes, 4 km of pedestrian paths and around 950 additional cycle parking stands were installed. The combination of measures, such as cycle lanes, marketing and promotion, helped to increase cycle mode share. This led all cities that implemented these measures to a change in modal split towards cycling, ranging from 1 % to 7 %. The bike-on-bus experiments were very successfully, serving leisure destinations, with one route experience one in four riders bring a bicycle.

The process evaluation again sheds some very interesting light on this measure. Bicycle measures were In Norwich, one in four Car Club members got rid of a car after joining and half decided not be buy another car. Members reduced short car trips use by 17 %, partly by increasing cycling (12 %) and walking (9 %).

deemed the most effective in successfully implementing the measures fully and meeting intended objectives among all measures evaluated.

# WHAT WAS EXPECTED TO WORK BETTER?

In contrast to public transport, riding a bike and walking, car pooling and car sharing are less well known options in most cities. Awareness of these shared ride arrangements grew during CIVITAS, but was often lower than hoped, especially for car pooling. Among those aware of car pooling, many noted the inability to find a suitable partner with whom to ride and



Penaiernetz Stuttgai

Car pool system improvements in Toulouse resulted in the number of car trips removed from local roads from about 100 to almost 500 per day.

others noted irregular work schedules as a barrier to car pooling. In the case of car sharing, in a couple of cities, growth in the car sharing fleet outpaced the growth in demand, creating some cost inefficiencies. The ratio of car share members to vehicles ranged from 7:1 up to 83:1. Regarding cycling, the bike sharing or bike rental schemes did suffer from misuse and vandalism, but they are generally appreciated by users and non-users alike.

# HOW CAN BARRIERS BE OVERCOME?

A couple of barriers were mentioned by those evaluating car pooling and car sharing programs. First, a critical mass is necessary to make car sharing efficient and ultimately profitable. Likewise, enough users are needed to create a sufficient database to find quality ride matches. Therefore, careful market studies and demand analyses are a prerequisite to successful shared vehicle projects. Second, car pooling and car sharing initiatives can suffer from some negative preconceived ideas. Some environmental advocates view these modes are not fully "green" in that they still rely on cars and may draw users from public transport riders. Additionally, the car owners' constituencies, such as auto clubs and advocacy interests can view car pooling and car sharing as a threat. In both cases, these misled perceptions can be addressed through careful and early engagement of all stakeholders and opinion leaders in the planning and development process. Finally, with respect to bicycling, a good knowledge of how laws and regulations affecting traffic apply to bicycling is very helpful to avoid future conflicts.

# WHAT IS THE KEY TO POLICY ADOPTION?

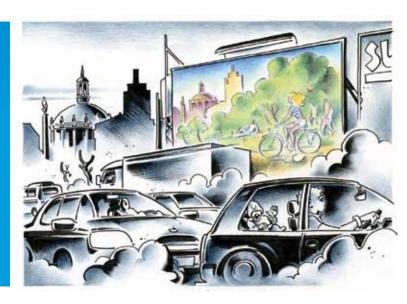
The process review concluded that car pooling, car sharing and cycling schemes generally enjoy broad policy support. Policy makers need to be convinced of the need to fund the start-up and incentivise users of new systems, which they might perceive as better organised by the private sector. Bicycle and walking measures were successful, in part, because the mode is well-known, the technology proven and straightforward, and stakeholder support is generally widespread.

#### **FINAL THOUGHT**

### A New Mobility Culture

Alternative forms of car use such as car pooling, car sharing and "active modes" have the potential to make a valuable contribution to enhancing the sustainability of urban mobility. They can support a new culture of car use. One lesson from CIVITAS car pooling and car sharing projects was the need to integrate these measures into overall urban transport policies and coordinated packages of sustainable urban transport systems that include public transport options, bicycle and walk incentives, and traffic management controls.

Influencing travel behaviour through mobility management, including communications, partnerships, and education.



# **SOFT** MEASURES

# Mobility Management: Enhancing and Communicating Travel Choices

Mobility management is a fundamental component in creating a new culture for mobility in cities. The European Platform on Mobility Management (EPOMM) defines it as:

Mobility Management (MM) is a concept to promote sustainable transport and manage the demand for car use by changing travellers' attitudes and behaviour. At the core of Mobility Management are "soft" measures like information and communication, organizing services and coordinating activities of different partners. "Soft" measures most often enhance the effectiveness of "hard" measures within urban transport (e.g. new tram lines, new roads and new bike lanes). Mobility Management measures (in comparison to "hard" measures) do not necessarily require large financial investments and may have a high benefit-cost ratio.







# Mobility Management in CIVITAS II

In essence, mobility management supports the day-to-day activities of sustainable urban transport by providing the support, coordination, information and promotion needed to make people aware of and using more sustainable modes. One form of this is the mobility plan, a roadmap for implementing sustainable travel at a company or school. Mobility agencies also provide centralised resources for these activities. Mobility management involves marketing and education efforts to better inform travellers of their options and way to travel cleaner and better.

Twelve of the 17 CIVITAS II cities implemented mobility management as part of their integrated strategy.

This is to be expected, since as the definition applies, mobility management is highly supportive and complementary to other measures. The most common mobility management measure was the development of mobility plans, undertaken by ten cities. These plans were developed at sites were car traffic is generated and where opportunities exist to influence these drivers. Mobility plans were developed for companies and hospitals (to influence the travel behaviour of their employees); for schools (both universities and schools): and for clusters of companies in distinct employment areas.

Other mobility management measures included the establishment of mobility agencies that housed staff to help all travellers, companies, schools, residents, visitors, etc. These agencies were established in Genoa and Toulouse and another mobility agency was established in the har-

bour redevelopment area in Odense. Mobility marketing was pursued by eight cities to increase the awareness of sustainable travel options among residents and visitors. In some cases this took the form of targeted marketing campaigns, but in three cities, it also involves establishing a Mobility Forum as a roundtable to allow citizens to provide input to sustainable travel plans and options in their city. Finally, one specific type of education, eco-driving, was implemented in Malmö for three distinct user goods, including truck drivers.

#### WHAT WORKED WELL?

Mobility plans are a well-established measure in Europe, so there was not too much experimentation involved. However, a key difference in CIVITAS is the fact that other measures were being implemented simultaneously as part of integrated packages, thus improving and broadening the options that could be included in the Mobility Plans. Car use decreased by 1 % to 13% among the targeted travellers, with shifts to various sustainable modes. Some cities were surprised at the nature of the shifts. For example, the shift to cycling and walking was higher than anticipated for several cities. Three of the cities combined individualised marketing with their mobility management efforts. This involved consultation with individuals one-onone to assess their travel options, at companies or in neighbourhoods. While these individualised programs can cost EUR 300-EUR 400 per tar-

Eco-driver training in Malmö allowed truck drivers to use 9 % less fuel, saving over EUR 300.000 and removing 300 metric tons of CO<sub>2</sub>

A new carpooling programme in La Rochelle has increased sharing by nine fold to the city centre, saving over 125,000 litres of fuel per year at a cost of less than EUR 4.000

geted household, the results can be very positive, with car use down 6% in Malmö and over 10% in Preston.

Mobility marketing and mobility agencies are a bit harder to evaluate, as they are more enablers that support enhanced traveller options. However, as measured by citizens' awareness of sustainable travel, the projects were quite successful. For example, 88 % of Suceava residents were aware of bus improvements after one year, in part due to the efforts of the new mobility centre. In Kraków, where the CIVITAS brand itself was marketed on signs and trams, almost half (47 %) of all residents were aware of CIVITAS.

# WHAT WAS EXPECTED TO WORK BETTER?

Targeting of mobility management measures to travel market segments was a useful exercise. Attempts to encourage sustainable transport that were not as clearly defined were less successful. For example, efforts to employ personalised travel planning in a residential area in Norwich were not successful, whereas the efforts at an adjacent hospital were. Likewise, plans to create "super" mobility plans and set-up mobility centres for an entire employment area in Toulouse were more difficult to implement than those targeted to companies on a one-to-one basis.

# HOW CAN BARRIERS BE OVERCOME?

Cities reported that the two most significant barriers were organisational in

nature, coupled with citizen acceptance. Organisational barriers stem from the fact that a new player, the mobility manager, comes onto the scene and may be seen as competition to other transport providers. Acceptance issues come from the notion that people do not like change. However, CIVITAS has shown that once a traveller tries a new, sustainable mode, they tend to like it. Thus, the barrier to overcome is gaining acceptance among existing stakeholders (via an open and consultative process and clearly delineated roles) and to provide incentives and fun ways to get people to try a new and cleaner way to travel.

### WHAT IS THE KEY TO POLICY ADOPTION?

The process review identified several key precursors to the overall success of mobility management measures. First, political support is key, to help overcome any organisational resistance or barriers. Second, given the nature of mobility management, a very sound communications strategy is a must - one that involves the media as a partner. Finally, targeting of potential user groups is very important so that resources can be focused on those most likely to change their behaviour. Finally, policy-makers sometimes have to be patient. Mobility management is a relatively low-cost set of measures, as compared to technology and infrastructure, but results often take time to materialise as behaviour change can be slow to gain momentum.





#### **FINAL THOUGHT**

### A New Mobility Culture

Several of the cities that implemented mobility management measures, focused on communication and support, reported that one overall result was the creation of a new mobility culture where residents and visitors recognised the importance of sustainable travel, and more importantly, were willing to try and adopt these new behaviours.

Developing safe and secure roads for all users and managing parking



# ACCESS RESTRICTIONS

# Filtering for Cleaner, Better Transport

One set of measures focus on demand management strategies that are based upon access restrictions to the inner city areas and other sensitive zones by means of introducing access control permitting, access only to clean and energy efficient vehicles (including collective transport vehicles) and to cycling and walking. It also includes the strategic management of parking to dissuade some car users from driving to highly congested places or during peak times and to encourage the use of more sustainable modes.

Controlling access manages the amount and type of vehicles in sensitive areas and can work to make road space safer and more secure for all potential users, drivers, bus patrons, cyclists, pedestrians, residents, shopkeepers, etc. Access controls are not new to Europe. For over 40 years, cities have been restricting car access to crowded, historic centres that were never designed for cars or trucks. However, with the advent of new technologies, access can be controlled just for certain types of vehicles or user groups. Likewise, information, payment and enforcement technology applied to parking has made the management of where, when, and even if cars park more effective. Of course, severe congestion and insufficient parking is a pre-requisite for these measures, but then again, these conditions have really become pervasive in most cities.









# Access and parking controls in CIVITAS II

Parking management involves an integrated package of strategies to place, price, and promote parking in more sustainable ways. Toulouse implemented a new and aggressive parking policy to support its investment in improved public transport. Parking supply was reduced by 20% in the city centre and 60% of all spaces were priced. A parking management scheme was adopted in 19 neighbourhoods that discourages long-term parking and protects resident availabil-

ity to needed parking in a system that gets progressively stricter the closer to the centre

The exclusion of non-priority traf-

fic was matched with measures to increase the pedestrianisation of certain city centre areas in several cities. In Ploiesti, the first pedestrian ways (4.3 km) and bike lanes (8 km) were built, supporting a new car-free zone that included controlled parking nearby

and better priority for public transport.

A new conference centre in Debrecen

was built with all underground parking and pedestrian areas all around, a tram stop, and access to the city centre. In Preston, speeds in and around a pedestrian area were reduced to 20 mph (about 32 kph) to discourage through traffic

**Rational schemes for segregating** vehicles and influencing travel behaviour were employed as well. In Kraków, reinforcement of its "A-B-C Zones" was accomplished in and near the city centre. All vehicles are prohibited from the "A" core, and only residents and delivery vehicles are allowed into the "B" Zone. The "C" Zone also works to reduce traffic via parking changes. Kraków uses license plate recognition cameras to enforce legal vehicles in the "B" Zone. This system has removed many cars from the city centre and increased the attractiveness and operating speeds of trams.

An innovative scheme in Venice provides a new permit scheme for the 70,000 yearly tour buses entering the historic city and its limited traffic zone (ZTL in many Italian cities). Cleaner buses (Euro IV engines) get special permit pricing and this is increasing the number of cleaner bus-

CIVITAS II involved access and parking controls among 14 of the 17 participating cities. Four types of measures were employed:

- 1. Parking management
- 2. Exclusion of non-priority traffic
- 3. Influencing behavior of certain user groups
- 4. Restricted zones (limited traffic or emissions)







es accessing the city centre (Euro IV buses increased from  $0.5\,\%$  to  $5.5\,\%$ in one year). The new permit scheme was accompanied by an education campaign for both tour operators, but also for the students who enjoy school trips to Venice so that they might understand the impacts of their travel on the urban environment and means to reduce their footprint. Finally, a few cities (Stuttgart and Suceava) specifically banned higher emitting vehicles through "limited emission zones" and others limited traffic in specific zones, such as Genoa's BLUAREA to address environmental, traffic and liveability objectives. In all, the introduction or extension of 'clear zones' consisted

In Burgos the number of cars crossing the city centre fell from over 2,000 to 200 and the number of pedestrian crossings more than doubled and cycle crossings rose 10 fold.

of 5 traffic calmed zones, 8 enhanced environments for walking and cycling, 3 wider traffic plans to reduce pressure on the centre, 3 environmental schemes, 6 approaches to consultation to improve decision making and delivery and 2 novel approaches to measuring impacts.

#### WHAT WORKED WELL?

Combining access and parking measures seemed to have significant synergistic impacts. For example, in Burgos, a combination of traffic restrictions, parking management, pedestrian and cycle improvements, and improved bus services had a profound impact on traffic in the historic centre. The number of cars crossing the city centre fell from over 2,000 to 200 and the number of pedestrian crossings more than doubled and cycle crossings rose 10 fold. Based on interviews conducted with key staff, there was a great desire, on the part of politicians, to create a noticeable change in time for the 2006 CIVITAS Forum Conference, hosted by Burgos.

Integrated parking management had a positive impact on traffic and clean transport. In Toulouse, the Car

Parks Action Plan resulted in spaces being used for shorter times and illegal parking was reduced. Resident parking passes were well received (78 % were happy with the system) as their parking search time plummeted from 23 minutes down to 5 minutes. Toulouse also redesigned one downtown avenue (rue Alsace-Lorraine) to give priority to walking and cycling, resulting in a reduction of traffic from 8,000 cars per day down to 3,000. Parking management in the Venice mainland area of Mestre resulted in a three-fold increase in park-and-ride use and, while overall traffic levels are still climbing, they are increasing less than expected, plus traffic levels during the most congested periods are going down (10%).

The new car free zone in Ploiesti, and its supportive actions to encourage clean transport, resulted in traffic in the immediate areas falling by 11% and localised air pollution dropping by 10–13%. This success was celebrated during the 2008 European Mobility Week, including a workshop for high school students called "Ploiesti city centre – clean air for all!" The Low Emission Zones in Stuttgart



In Toulouse resident parking passes were well received (78% were happy with the system) as their parking search time plummeted from 23 minutes down to 5 minutes.

and Suceava reduced emissions by 2–6%, especially nitrous oxides, and a ban on heavy trucks and diesel engines resulted in a reduction of 8% for fine particulate matter and NO<sub>x</sub>.

# WHAT WAS EXPECTED TO WORK BETTER?

Some areas were forced to scale back on their plans and geographic areas within which to impose access or parking controls. Others never received the political or popular backing to move forward. The mobility credit scheme, while very innovative, does not lend itself to technological efficiencies due to the need to monitor, equip and even weigh a potentially large number of vehicles that might be used to deliver goods.

# HOW CAN BARRIERS BE OVERCOME?

Like pricing, access controls can be quite controversial. It is not only important to involve stakeholders and potential affected groups, but it is equally important to have a good understanding of the regulatory restrictions (or lack of enabling legislation) to allow access controls, especially when it in-

volves the need to photograph license plates or identify vehicle whereabouts.

# WHAT IS THE KEY TO POLICY ADOPTION?

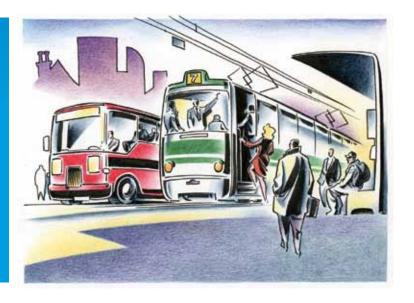
Evaluators of these measures concluded that while the successes were delivered through innovations in policy and delivery, as well as through new technology, success was almost always dependent upon consultation and engagement. Policy makers need to be patient. Experience with CIVITAS shows that while opposition can be widespread at the conception stage, citizens' perceptions of how a city centre is managed change over time (in Burgos, dissatisfaction fell from 76% to 33%), becoming much more positive as the benefits are directly experienced. In fact, 30 % of Genoese responding to CIVITAS surveys stated that the BLUAREA scheme improved order in the city centre. Also, politicians need to be shown the clear benefits of implementing such controls, including testimonials from peers in other cities who now embrace the ease of movement in their downtown areas.

#### **FINAL THOUGHT**

# Can cars ever really be controlled?

It was stated that access controls have a long history in Europe. However, this does not diminish the successes achieved through CIVITAS. While cities that were new to such management schemes, especially in new member states, achieved results in short order, so to, cities with considerable experience with traffic and parking controls achieved new benefits from the expansion, improvements, and technology applications realised as a result of CIVITAS. Perhaps as important, controls are no longer applied equally, but invoke rational schemes for filtering out vehicles that degrade conditions and giving priority to cleaner, more sustainable modes.

Improving the quality and efficiency of public transport and better integration with other modes



# COLLECTIVE PASSENGER TRANSPORT

The stimulation of collective passenger transport, as defined with CIVITAS involves improved quality of service by means of introducing clean and energy-efficient vehicle fleets; non-conventional public transport systems; innovative organisational, financing and management schemes; improved security and safety; integration with walking, cycling and other modes; in particular attention should be paid to accessibility for people with reduced mobility.

# Making Public Transport Work Better For Everyone

One measure to improve public transport involves infrastructure improvements, such as new park-and-ridelots, station improvements, and telematics networks. And the introduction or expansion of clean vehicles into fleets is an important aspect. Making public transport more convenient can involve restructuring of routes and support services or making ticketing and fare payment easier. Specialised services,

such as demand responsive transport and services of mobility impaired are also part of mix. Giving priority to trams and buses is an important traffic management measure. Finally, and perhaps most importantly, improving the quality, availability, timeliness and multi-modality of public transport information is a vital activity in making European public transport systems even better.

# COLLECTIVE PASSENGER TRANSPORT THE 6 SUBCATEGORIES



Public transport
measures were by far
the most popular strategies within CIVITAS II.
16 of the 17 CIVITAS
II cities implemented
some 59 measures, defined in six categories.
If you include the use
of clean buses, then all
17 CIVITAS II cities were
involved in improving
public transport.

#### 1. Public transport information.

such as intermodal "infomobility" tools in Burgos, Genoa and Kraków and real-time information in Malmö and La Rochelle.

# 2. Public transport ticketing and fare policy, such as integrated ticketing and pricing in La Rochelle and Preston.

#### Infrastructure for public transport, such as a tramway priority scheme in Debrecen and proximate services (convenience shopping) and transport stations in Toulouse

# 4. Accessible transport for mobility impaired, including deployment of low impact, accessible water buses in Venice.

#### Improvements to the public transport network, including the implementation of demand responsive service in Kraków, Potenza, Preston and Toulouse.

#### Safety and security on public transport, such as the installation of camera on buses in Malmö and driver safety training in Debrecen.

# Public Transport Measures in CIVITAS II

#### WHAT WORKED WELL?

While none of the measures implemented was large in scale (such as new tram line, station or total restructuring of services, the targeted, yet integrated nature of public transport measures implemented within CIVITAS II produced many successes. One example of a high profile new service was the implementation of a 5 km bus rapid transit route (or "high mobility

corridor") that vastly improved travel times, saving users 900 hours per day, and ridership gains on the route and network. Small measures can have an impact as well. In Odense, riders are able to pay their fare using their mobile phones using SMS ticketing (as well as get information via SMS) and 5 % of all fares are now paid in this manner. Modern information delivery systems as websites, sms-services

and real time information at bus, tram and metro stops and in vehicles support a positive image of public transport and are appreciated by the users. The Malmö website attracted 1,600,000 visitors a month and their SMS information system attracted 45,000 users per month. The goal of a 2% increase in overall use of public transport was achieved. The use of the new website in Kraków is also









considerable (190,000 per month) and that city realised an almost 6% growth in public transport use during the period of CIVITAS.

Several cities worked to make buses more accessible to people with mobility challenges. In La Rochelle, where the public authority is investing EUR 1,4 Mio. over ten years, the proportion of riders with limited mobility has risen and 98% of citizens surveyed approved of the efforts. Demand responsive services were implemented in several cities, including Toulouse where DRT (Demand Responsive Transport) was substituted for low patronage routes. While the service is less expensive than conventional buses, the subsidy per passenger is quite high. However, as an alternative to cutting service altogether, DRT can address social inclusion issues.

Collective employee bus services (5,000 employees at 200 companies) were reorganised and expanded in Burgos resulting in increased satisfaction among employers, lower costs per passenger, and higher passenger loads. In Malmö, the installation of cameras on buses was partially responsible for a 7 % increase in system ridership as 13 % of passengers

stated that they travelled more due to the imposition of cameras with 60 % stating that the cameras made the buses safer. In conclusion, one overall indicator of success for all the public transport measures was the high level of customer satisfaction measured in response to the various improvements – residents and riders alike were very supportive of the measures.

# WHAT WAS EXPECTED TO WORK BETTER?

It was difficult to gauge the ultimate objective for these measures, increased public transport ridership or to determine whether changes in ridership were due exclusively to the measures. Integrated fares and ticketing was expected to increase overall revenue, yet the administrative cost involved and little indication that net ridership levels increased meant that revenue boosts were not realised. Organisational barriers were reported among the cities working to improve accessibility for patrons with limited mobility and this may be due to the plethora of agencies that need to be involved for the planning, funding and implementation of accessibility improvements. Physical improvements



In La Rochelle, where the public authority is investing € 1,4 Mio. over ten years, the proportion of riders with limited mobility has risen and 98 % of citizens surveyed approved of the efforts.

to stops, stations and new park-andride lots did not seems too well utilised with patrons less appreciative of these amenities as with service improvements.

# HOW CAN BARRIERS BE OVERCOME?

When it comes to information systems, immediate resolution of technical difficulties or erroneous data needs to happen to maintain user confidence. Also, the users are generally not willing to pay for this information, so ongoing funding sources are often needed. New ticketing and fare integration can also experience technical glitches and ongoing education and visible assistance may be needed at ticketing machines. The administration coordination needed to disperse revenue needs to be clearly and officially delineated. Understanding the needs of visitors (different language, unfamiliar with city) is also vital, especially in areas with a growing tourism economy. Finally, since many of these measures require new technology and capital purchases, flexibility in schedule and funding contingencies may be needed.

# WHAT IS THE KEY TO POLICY ADOPTION?

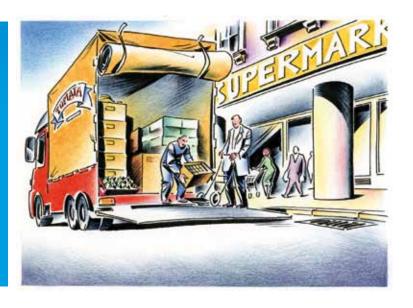
There is generally widespread public support for improved collective passenger transport. Most Europeans use public transport, at least occasionally, whereas other sustainable modes, such as car sharing or bicycle use might just be too "foreign." Therefore, political support may be a bit easier than with other measures, especially pricing or access restrictions. However, collective transport measures require the full buy-in of both the city administration and the public transport operator. Some operators may be reluctant to change their systems, especially if it has ongoing budget implications. Assuring the integral participation of city administrators, public transport operators, driver unions, system users, and special groups (e.g. mobility impaired) is vital to the adoption and implementation of these measures. Educating stakeholders on the range and level of potential benefits is also a must. Finally, given the technology and capital costs of some of the measures, a sound financial plan must be prepared to convince stakeholders that resources will be available.

#### **FINAL THOUGHT**

### Can Public Transport Get Cleaner and Better?

The fact that every CIVITAS II city implemented at least one measure related to improved public transport or clean buses illustrates the importance of these activities within well-designed packages of strategies to promote sustainable urban transport. Non-Europeans look with awe to cities in Europe for their efficient and extensive public transport systems. But CIVITAS shows us that these systems can get better by providing real-time, multimodal information, by making vehicles accessible to all (tourists, handicapped), by making the systems safer, by building new partnerships with employers and others, and by making riding buses, trams and metros easier with one ticket and one place to get information.

Promoting energy-efficient freight logistics and new methods for goods distribution that contribute to better overall urban transport



# URBAN GOODS TRANSPORT

### Going Beyond Clean Passenger Transport – Freight Logistics in Cities

A significant amount of traffic in our cities is generated by the delivery of goods to shops, factories, offices, hotels, etc. These vehicles take up more space than cars and require space to load and unload. Overall strategies to create cleaner and better transport in cities necessitates the inclusion of goods vehicles by encouraging the use of cleaner vehicles and better coordination of logistics and deliveries to reduce congestion, free space for sustainable modes, and reduce emissions from idling trucks and vans.

Goods movement initiatives with-

in CIVITAS included the coordination of delivery schemes, better traffic information to increase efficiency, use of cleaner vehicles, and new partnerships among freight providers. Much of the effort was geared toward educating the freight sector on the impact of their operations and methods on urban traffic and measures to improve sustainability.









DPD Dynamic Parcel Distribution GmbH & Co. KG

# Goods Movement and Logistics CIVITAS II

Much of the work with CIVITAS II involved coordination, information and new regulations aimed at better balancing delivery vehicles with cars and sustainable modes. This involved limiting trucks and delivery vehicles into the centres of some cities that were working to improve conditions for pedestrians, cyclists and public transport riders. Toulouse and La Rochelle used electric vehicles to make deliveries in the pedestrian zone, resulting in a 58 % reduction in CO<sub>2</sub> with the approval of most of those making the deliveries. Three cities initiated logistics partnerships to bring together freight operators, delivery companies and city transport administrators, including a Freight Quality Partnership in Preston that contributed to a strategic plan.

#### WHAT WORKED WELL?

The successful activities within CIVI-TAS II tended to be with measures that restricted deliveries within autorestricted zones. A new set of regulations in Burgos was aimed at reducing the number of delivery vehicles within a "clean zone" that was largely pedestrian oriented. This resulted in a halving of the number of delivery vehicles accessing the clean zone (from 480 to 260 per day). In Genoa, a coordinated

van sharing scheme was piloted, encouraging deliveries to be made in one van. This, coupled with new regulations on access to the limited traffic zone, resulted in better routeing and reduced travel times for deliveries. In Norwich, shoppers' packages were delivered to a major park-and-ride facility to increase convenience for bus users. Some 60 of the customers had not previously used the park-and-ride service.

# WHAT WAS EXPECTED TO WORK BETTER?

Nine CIVITAS II cities tested measures aimed at goods delivery and freight operations. While several sites sought to implement cleaner vehicles, only one of five cities was able to realise this objective. Coordinated distribution centres experienced higher than expected costs, especially staffing costs, and coupled with hauliers resistance and low utilisation, the economics were not favourable. One freight consolidation centre was established in Norwich, leading to reductions in the number and size of delivery vehicles. However, it was

The successful activities tended to be with measures that restricted deliveries within auto-restricted zones.





difficult to get companies to use the consolidation centre, whereas allowing delivery vehicles to use the bus lanes was somewhat controversial.

Logistics partnerships worked to bring together the appropriate stake-holders for better coordination, but two of the three cities had difficulty garnering interest among the private sector participants. Finally, in Ploiesti, new freight routes were signed to take trucks around the city centre, but hauliers have not been actively involved or supportive. Overall, it might be said that a lack of meaningful cooperation among freight companies, coupled with high start-up costs, may have significantly impacted the disappointing results within this building block.

In fact, the process evaluation cited this cluster to have proven the most challenging and two reasons were cited. The measures were seen as competitive with private enterprises and this issue was compounded by the fact that freight and logistics involves a rather small target market. Therefore, anything that was perceived as threatening competition in a small market was bound to be met with substantial barriers.

### HOW CAN BARRIERS BE OVERCOME?

Many of the intended measures were not realised within CIVITAS II, especially freight consolidation schemes and introduction of clean fuel deliver vehicles. Costs were one factor, but apathy or resistance from freight companies was a significant barrier. It might take more time to organise and gather support for cleaner urban goods transport. In all, strong and persuasive communication is needed to clear up any misconceptions, garner public support, and educate the private sector on the potential benefits.

# WHAT IS THE KEY TO POLICY ADOPTION?

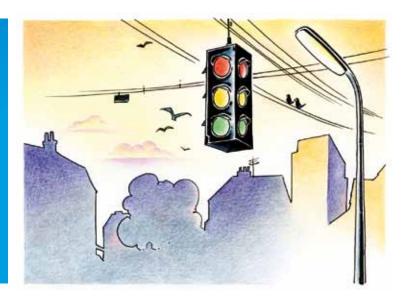
A strong political commitment is needed to shepherd the policies, regulations, and funding for urban goods coordination projects. Involvement of all the necessary administrations, freight companies, private users of deliver systems, and even citizens is critical to build consensus on the need and plans for the better coordination of goods movements in cleaner cities.

#### **FINAL THOUGHT**

### Is Sustainable Goods Movement Impossible?

While the results from CIVITAS II are somewhat disappointing, in that cleaner fleets were largely not realised and freight consolidation centres were very difficult to implement, the role of trucks and delivery vehicles in the future of our cities remains a vital issue. Perhaps grass-roots efforts among citizens, who are becoming more accepting of fewer cars in our congested urban areas, might rally to the cause of decreasing the number of goods vehicles as well. A car free zone, clogged with delivery vehicles, is somewhat defeatist of the concept of prioritizing streets for sustainable modes.

Improving traffic conditions through better coordination, traveller information, and the use of technology



# TRANSPORT MANAGEMENT

# Managing Traffic for the Benefit of Sustainable Modes

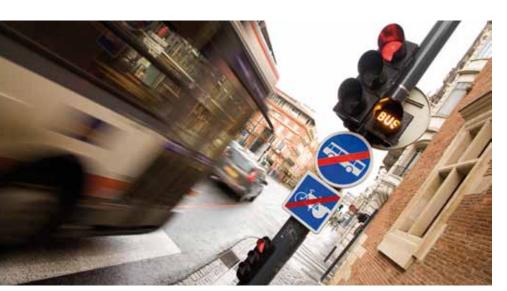
While traffic management may seem to be more about managing cars, in the case of CIVITAS, it is about better coordinating traffic flow for all users, benefitting public transport with faster travel time and cyclists and walkers by making roads safer.

There are three types of transport management activities to report. First, better collection, coordination and use of traffic data to manage traffic, and tools to evaluate, visualise and warehouse this information can help solve bottlenecks and unsafe situations. Second, traffic operations can be prioritised to give time advantages to sustainable modes, particularly

public transport. Finally, while parking was discussed in previous chapters, parking information and parking management is another form of transport management. These measures are largely enabled by new technologies, including global positioning systems, wireless data transmission, automated traffic counting devices, and high resolution cameras.









# Transport Management in CIVITAS II





Traffic management was a key supportive element in parking management, public transport improvements, and goods movement measures. It also served to improve traffic flow in general. Cars stuck in traffic not only degrade the quality of life for drivers and those on the streets, but idling engines emit pollution while constraining the mobility of those in the cars. CIVITAS II involved access and parking controls among 12 of the 17 participating cities.

Traffic monitoring and control was accomplished via new traffic monitoring centres in Kraków and Genoa. An Integrated Traffic Management Centre was opened in Stuttgart to handle large-scale events (first being the World Cup in 2006) and unplanned incidents. New data management systems and visualisation tools were designed in Burgos and Preston. New monitoring devices on buses were employed in Toulouse, using

GALILEO/EGNOS (European Geostationary Navigation Overlay Service) positioning systems and GPS tracking installed on the 250 bus fleet in Ploiesti and on buses in Suceava. GPS technology was installed in delivery vehicles in Malmö, allowing for real-time adjustments to routes and schedules to avoid back-ups or accidents.

One very interesting project was related to traffic management on a different kind of thoroughfare: the Grand Canal in Venice. First, an innovative system to identify and track all vessels via an Automated Remote Grand Canal Observation System (ARGOS) to help enforce regulations already on the books, provide continuous monitoring of waterborne traffic, and contribute to the development of new traffic management policies. GPS systems were also employed for water bus services (vaporetti) to contribute to water traffic management and





provide real-time information to users. Finally, as reported in other sections, clean LPG boats were added to the fleet (specifically, pilot boats) and routes from Murano were made more accessible for riders with impaired mobility. These measures in Venice give improved traffic "flow" a whole new meaning!

Advanced traffic controls can be applied to priority schemes for trams and buses, providing travel time savings for public transport, which is sometimes perceived as too slow. Integrated schemes, called high mobility corridors, were implemented in Genoa, La Rochelle, Toulouse and Kraków. This involved dedicated bus lanes, expanded services, improved stops with real-time information, and priority crossings. In Toulouse, two new High Quality Bus Corridors were built to serve the ends of a new metro line to reduce travel time for these long trips. Another corridor in the city centre involved extending a bus-only lane. In Genoa, cameras were used to create "optical gates" to enforce the

bus-only use of the lane. Signal priority schemes were also implemented in Toulouse, Malmö and Tallinn. For example, the priority system in Tallinn involves 158 buses and trolleybuses on 9 routes, covering 10 kilometres and 30 intersections.

#### WHAT WORKED WELL?

In the area of public transport priority schemes, multiple bus priority lanes and high quality corridors were implemented, improving public transport service by reducing waiting time and travel times. Impacts on travel time were very positive for these measures and significant public transport travel time reductions were achieved, in some cases even up to 25 % (Toulouse) for high mobility corridors. Bus speeds in Toulouse were up to a third faster. This led to increased passenger volume and higher occupancy rates. In places where priority schemes were implemented on the regular network, the average travel time savings ranged from 3.5 % to 16 %. The environmental impacts of traffic management measures were very positive as

The environmental impacts of traffic management measures were very positive as well, with significant fuel savings (up to 8 %) and emission reductions (up to 70 %).

well, with significant fuel savings (up to 8%) and emission reductions (up to 70%). In Toulouse, the speeds for all traffic (not just buses and trams) were shown to have improved.

One of the most important indicators for the quality of public transport services is the accuracy of public transport schedule reliability. In some cases, bus priority measures and other bus improvements reduced the percentages of delayed buses by up to 32 % (in Suceava).

# WHAT WAS EXPECTED TO WORK BETTER?

Some areas were forced to scale back on their plans and geographic The process evaluation concluded that measures perceived as improving traffic safety were more likely to be supported and successfully implemented.



areas with which to impose access or parking controls. Others never received the political or popular backing to move forward. The mobility credit scheme, while very innovative, does not lend itself to technological efficiencies due to the need to monitor, equip and even weigh a potentially large number of vehicles that might be used to deliver goods.

# HOW CAN BARRIERS BE OVERCOME?

For one thing, bus priority schemes, high mobility corridors and traffic management are not "one size fits all." Because of the diversity of European cities, transport management measures have to be flexible and adapted to the existing infrastructure. Once the systems are planned, citizens must be made aware of upcoming construction, no matter how small, that might serve as temporary impedance to traffic. Finally, the deployment of GPS technology in vehicles can garner some opposition from drivers or operators. However, once the purpose of the system is explained (real-time information rather than performance), these worries can be tempered.

# WHAT IS THE KEY TO POLICY ADOPTION?

While traffic management is generally loved by all citizens, bus priority schemes may be perceived as inconvenient to car uses. However, when considered within an integrated system or urban transport management, better coordination of car and public transit movements benefit everyone and make for a much safer city. The process evaluation concluded that measures perceived as improving traffic safety were more likely to be supported and successfully implemented. Traffic management centres, high mobility corridors and even priority schemes and vehicle locator systems can be quite expensive. Having adequate financing lined up is important to make sure stakeholders are confident in the measure. Since traffic management and priority schemes for public transport involve just about every type of stakeholder, early and inclusive dialog and planning is required.

#### **FINAL THOUGHT**

### How Does Helping Cars Help?

Much of the notion of these building blocks revolved around making traffic, in general, and public transport vehicles, in particular, flow better.

Dedicated lanes for buses, or signal priority schemes (allowing buses to have a green light) are clearly the best way to enhance this sustainable mode. However, when all traffic flows better, buses and trams will travel faster and people will perceive their quality of life and mobility better. Moving cars and full buses are better for the environment as well.



# CIVITAS II FACTS & FIGURES 2005-2009

So, what was learned from CIVITAS II about what worked well and why? What measures were the most successful? What were the tangible results from CIVITAS II?

The number, type and complexity of measures and packages of measures tested within CIVITAS make these questions somewhat difficult to answer in a simple way.

However, CIVITAS II took great effort to evaluate the impacts of each measure and process for implementing them. Separate impact and process evaluation were undertaken as part of CIVITAS GUARD to consistently

and comparatively assess the results from CIVITAS II. This section provides a summary of key findings from the impact evaluation, in the form of "facts and figures", some key findings from the process evaluation.

Additionally, some personalized insights are provided in the form of an interview with Professor Mike McDonald, who was responsible for overseeing the impact evaluation of CIVITAS II.

CiViTAS

# KEY FINDINGS FROM THE IMPACT EVALUATION

The table below lists the key findings from the CIVITAS GUARD impact evaluation, which examined documentation and data from all CIVITAS II projects, cities, and measures.

#### KEY FINDINGS FROM THE IMPACT EVALUATION

- 17 demonstration cities across Europe implemented over 200 transport measures in 8 thematic areas (see chapter 2 on the CIVITAS building blocks).
- The number of CIVITAS Forum Network (chapter 1.4) cities grew from 83 in 2005 to almost 170 at the end of 2009.
- More than EUR 200 Mio investment (EUR 50 Mio of European Commission contribution)
- Introduction /expansion of 8 car pooling systems. Over 3150 new people started to use these car pooling services that were developed within CIVITAS II.
- Car sharing was introduced in 8 cities, resulting in a total increase of the car sharing fleet of 143 (clean) vehicles.
- The clean vehicle fleet increased with 700 vehicles, mainly by introducing/converting CNG, LPG and other fuels and biodiesel.
- Construction of 60 km of new cycle lanes and around 950 additional cycle parking stands. 4 cities initiated a new cycle rental scheme (bike share), resulting in 266 rental stations and a combined availability of over 2400 rental bicycles. All in all, the modal split for cycling increased between 1 % and 7 %.

- Three cities organised new mobility agencies or developed integrated plans for mobility services. These initiatives have been shown to serve a crucial role in bringing new travel options to outlying areas and integrating the delivery, promotion and/or administration of these options under one roof.
- 17 different mobility plans were implemented, some at multiple employer worksites. Awareness and acceptance by the general public of mobility planning efforts was as high as 90%, because of marketing and communications campaigns that were launched in 12 different cities.
- → Multiple bus priority lanes and high quality corridors were implemented, reducing bus travel times by up to 25% and resulting in significant fuel savings (up to 8%) and emission reductions (up to 70%). In some cases, bus priority measures and other bus improvements reduced the percentages of delayed public transport services by up to 32%.
- Significant usage of website and SMS information systems for public transport (with up to 1,6 Mio website visits and 45,000 SMS messages per month in just one city).
- Up to 99 % satisfaction by users of integrated public transport tickets and/or smart cards. No evidence was found during CIVITAS II that this has led to a significant higher usage and revenues, but given the high acceptance will likely be a positive long term effect on ridership.
- Installation of 5,000 new or re-designated off-street parking spaces (via park & ride or underground parking), along with signage and pricing incentives to park off-street and away from congested centres.
- Introduction / extension of a total of 13 zones with limited motorised traffic and establishment of 12 plans for limiting traffic and/or environmental impacts. All in all the access restrictions measures resulted in:
  - Reduction in car and coach trips by up to 12 % and congestion by up to 89 % in the traffic calming zones.
  - Significant emissions reductions of up to 13 %, as well as fuel savings by up to 20 %.
  - Growth in pedestrians by up to over 100% and cyclists by up to nearly 10 times was realised.
  - Dissatisfaction of citizens fell significantly from 76 % to 33 % in one city; 58 % of drivers satisfied in another city.

# **KEY SUCCESS FACTORS**

# FROM PROCESS EVALUATION

In addition to a consistent and rigorous impact evaluation scheme, within CIVITAS GUARD, a systematic and rigorous methodology was employed for the process evaluation to assess not only what are the results, but what are the main factors explaining success. The key findings from this process evaluation, in addition to the specific findings within each cluster as reported in chapter 2, are provided below.

#### KEY SUCCESS FACTORS FROM PROCESS EVALUATION

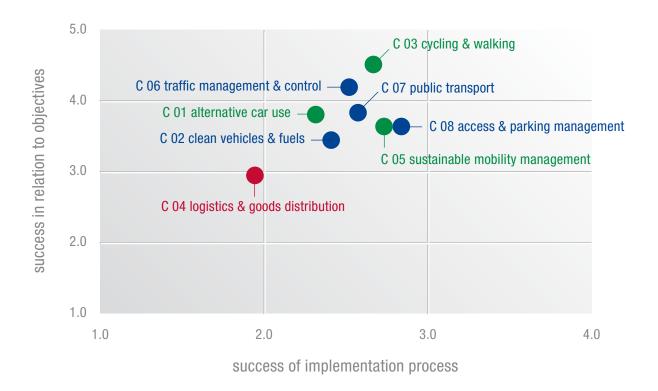
- Expect more intense barriers early in the implementation of your measure before you have achieved a critical mass of modal share of sustainable transport modes in your city.
- Expect more intense barriers if you are focusing on improvements in logistics and goods distribution in your city, as only a small target population is concerned and there is a lot of economic interest and competition among these actors.
- If you can argue that your measure improves traffic safety in your city, this will likely support the implementation of your measure.
- Complex and controversial measures do not necessarily impede the measure implementation process, if you are aware of the possible barriers.
- If you can define the entire population of your city, especially the residents of the affected area as your target population, than the implementation process will more likely be successful.

- Try to avoid changes in the measure leader during the implementation process.
- Be aware that groups affected by economic interest can act more likely as a barrier for the measure implementation in comparison to other stakeholder groups.
- Produce take-away material about your measure, explaining the aim of the measure and some images of how it will/could look. Consider participation in local radio and TV shows and organise public events during the measure implementation phase in order to make it more successful.
- Try to start with stakeholder involvement as early as possible.
- If you are in a cyclic funding regime try to start as soon as possible with the first implementation steps. Consider also political election cycles, which can affect your measure implementation. Try to harmonise the implementation process with such cycles.
- Try to amplify potential drivers such as the engagement and commitment of organisations and persons, or by receiving support from external positive promotion.
- Be aware of barriers by analysing the situation during the initial phase of project implementation. Most problematic barriers are acceptance barriers (Who? Why? What possible consequence? How to change the situation?) and management barriers (What is the specific deficit in administrative capabilities? Are the responsibilities clear? Could the communication process be improved?).

In terms of the influence of the process of measure effectiveness, the process evaluation provides some very interesting findings. The process evaluation developed a two-dimensional analytic tool to assess the influence of the implementation process on the ability of measures as implemented to meet their intended objectives.

As seen in the table below, the measures related to logistics and goods movement struggled to meet their intended objectives, in part because the implementation process was difficult (gaining acceptance, funding, etc,), whereas measures related to cycling and walking as a car reduction strategy scored highest in achieving their intended objectives, in part due to higher success in the implementation process.

The process evaluation concluded that this was due to having good combination of modes available, a broad set of objectives addressed, good stakeholder involvement and dedication, and an intense set of policy drivers. Additionally cycling and walking measures were more often implemented in cities with a higher starting modal share of non-motorised travel.



# MAIN CONCLUSIONS

# FROM CIVITAS II EVALUATION

- Attitudes towards sustainable modes have significantly improved in all 17 Demonstration Cities.
- Clean vehicles are on the rise implementation of Euro V is probably best in terms of environmental benefits.

  Electric vehicles have not been tested widely.
- SMART (specific, measurable, achievable, relevant and time-bound) measures for mobility management can be implemented relatively easily and have shown to be very effective.
- Access restrictions and parking control contribute to make travel better in city centres.
- Organisational planning is of major importance of the success of sustainable transport.
- Stakeholder partnerships have led to fruitful cooperation.

## **EXPERT PERSPECTIVE:**

# INTERVIEW ABOUT THE IMPACT EVALUATION

In order to add some personalised insights into the results of CIVITAS II, we interviewed the person responsible for overseeing the impact evaluation: Mike McDonald.



#### Mike McDonald

was Director of the **Transportation Research** Group at the University of Southampton 1982 - 2008 and has been responsible for some 100 research contracts for the Transport Research Laboratory, Department for Transport, **Engineering and Physical** Sciences Research Council, the European Union and other local and central government agencies. Professor McDonald is one of the world's leading experts on evaluating sustainable transport projects and his insights shed useful light on how CIVITAS II "measured up."

Interviewer: Why is evaluation, especially independent evaluation, important to a research and demonstration project like CIVITAS?

Prof McDonald: Evaluation is important at the city level to understand the effects of any measure or group of measures, and to identify changes which may be necessary to improve the measure(s). The knowledge gained from evaluation can be used to further promote the measures, and give confidence to policymakers to move forward with further applications. At a European level, the results of evaluation can be used to widely promote good practice in sustainable urban transport and an understanding of the associated processes for the delivery.

Do the cities share this sense of importance or what was their response? **Prof McDonald:** The city policymakers were very pleased with the results of the independent evaluations, particularly those which related to the satisfaction of users, who are their constituents.

What did you learn from CIVITAS that was unexpected or surprising?

Prof McDonald: Some cities developed such a substantial body of CIVITAS measures that they appeared to lead to widespread changes in attitudes and travel behaviour. This gave substantial political benefits to those involved. On the other hand, the measured benefits of biofuels were more mixed than expected.

Did one to two measures jump out at you as bring particularly effective in meeting the objectives of CIVITAS to create cleaner and better transport in cities? **Prof McDonald:** The effectiveness of modern trolleybuses and demand management measures were locally well received and generally effective. In terms of impacts, what were the greatest barriers to success?

**Prof McDonald:** Biofuels clearly have a substantial future role in powering vehicles, particularly in urban areas. However, the impacts were often reduced by problems in procuring biofuels to an acceptable standard.

What can be said about measures that produce "soft results" that are not easy to put into standard numbers?

Prof McDonald: Probably the largest contributions to improving urban sustainability result from behavioural change. The "softer" measures to change attitudes are often relatively low cost, but can be very effective in changing behaviour. However, such changes often occur over periods longer than those available for the CIVITAS evaluations and impacts of a specific measure can be difficult to disentangle from the effects of the wide range of other influences, such as increasing awareness of climate change.

What might be done differently in future initiatives like CIVITAS to improve impact evaluations and results?

**Prof McDonald:** The nature of the CIVITAS programme is such that most measures are only implemented towards the end of the project periods. As long term impacts may be very different from short term ones, I would like to see the evaluations running over a much longer period.

# WHERE DO WE GO FROM HERE?

The CIVITAS Initiative continues through CIVITAS PLUS and through the continued benefits from measures implemented in CIVITAS II cities. But the CIVITAS legacy extends well beyond participating cities. It involves all the cities that are part of the CIVITAS Forum Network, who benefit from the networking among cities committed to cleaner and better urban transport.

However, the CIVITAS reach has the potential to go far beyond the traditional CIVITAS "family." CIVITAS experience and results are shared at conferences, on the internet, and among transport planning professionals around the world seeking innovative solutions. The most important lesson to be shared among those interested in sustainable transport is the need to develop integrated packages of strategies tailored to the specific needs and opportunities of each city. Sometimes the measures used in sustainable transport are marginalised as being too small or focused to have a real impact on traffic or the environment.

However, when integrated packages are implemented and citizens become accustomed to having cleaner, better travel options, attitudes and behaviour can change as old habits are broken and new ones formed.

CIVITAS II has helped to create a common vision of what cleaner and better transport can look like ... and the view is clear and bright!

# **CONTACTS**

If you have questions on the second phase of the CIVITAS Initiative (CIVITAS II project), please contact either one of the four CIVITAS II demonstration projects, the CIVITAS GUARD team or the European Commission's representative. Contact details are listed below:

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#### CIVITAS CARAVEL, CIVITAS MOBILIS, CIVITAS SMILE AND CIVITAS SUCCESS

- → Final publishable project reports
- → Final publishable evaluation reports
- > Final publishable policy recommendation reports

#### **CIVITAS II THEMATIC LEADERSHIP PROGRAMME**

- → Flexible transport systems (Genoa, CIVITAS CARAVEL)
- → Urban bicycle traffic (Odense, CIVITAS MOBILIS)
- → Goods distribution and city logistics (La Rochelle, CIVITAS SUCCESS, and Norwich, CIVITAS SMILE)

#### **CIVITAS FORUM CONFERENCES**

- → Final publishable report CIVITAS Forum Conference 2006, Burgos
- → Final publishable report CIVITAS Forum Conference 2007, Kaunas
- → Final publishable report CIVITAS Forum Conference 2008, Bologna
- → Final publishable report CIVITAS Forum Conference 2009, Krakow

#### **CIVITAS GUARD**

- → Final publishable policy advice notes
- → Final publishable policy issues report
- → Final publishable overview of evaluation report
- > Final publishable impact evaluation cluster reports
- → Final publishable cost benefit evaluation report
- → Final publishable process evaluation report

#### **EUROPEAN COMMISSION**

- → Green Paper: Towards a new culture for urban mobility [COM(2007)55]
- → Action Plan on urban mobility [COM(2009)490]
- → The Citizens' Network fulfilling the potential of public passenger transport [COM(95)601]
- → Developing the Citizens' Network [COM(1998)431]
- → Keep Europe moving Sustainable mobility for our continent [COM(2006)314]



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If you have general questions on the CIVITAS Initiative please contact the CIVITAS secretariat:

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