Sustainable Mobility
Highlights 2002-2012

CIVITAS is a European Initiative involving more than 200 cities across Europe in the testing and sharing of new technologies and innovative concepts to achieve sustainable and integrated strategies for urban transport.

TRANSPORT TELEMATICS

Always the best information

Innovative transport telematics systems for traffic management and traveller support can make urban passenger transport faster, more reliable and more efficient and as such more passenger friendly.

In the field of transport telematics CIVITAS cities have worked on ITS for traffic monitoring, management and enforcement; ITS-based enhancement of public transport; and real-time road-user information. This highlight focuses on the last of these.

Real-time road-user information encompasses the use of road-based variable message signs (VMS) displaying information on traffic and car park or park and ride capacities. It also includes traffic reports to drivers’ mobile phones and other technology-based travel information services covering multiple modes of transport.

The implementation of these traffic information and management systems assists users in their choice of transport mode and facilitates a more efficient use of resources and existing road infrastructure. Road safety and congestion can be addressed as well because hazardous locations or situations are identified and mitigated on a real-time basis.

For this reason, the CIVITAS Initiative has realised 10 innovative measures in 10 cities on real-time road-user information. This highlight features some of the most successful and eye-catching among these to inspire other European cities.

Information and traffic guidance systems

The city of Ghent, Belgium, introduced a comprehensive traffic guidance system that integrates VMS for traffic information, traffic-signal management and parking guidance in a dynamic way. The system can also issue traffic warnings about upcoming road works and other disruptions. The system worked well and was well received by citizens. Queues around the Kouter parking facility effectively shortened by 10 percent. Positive public perception of traffic management along the CIVITAS corridor grew by 25 percent, according to a postal survey. A system implemented in Perugia, Italy, also forecasts traffic congestion levels and safety risks in different road sections, all in real time.

Other inspiring cities are Rotterdam (Netherlands); Vitoria-Gasteiz (Spain); and Winchester (United Kingdom).
Mobile information systems

Real-time information services via mobile applications increase safety, reduce congestion and upgrade city-based customer services. The city of Funchal, Portugal, developed an SMS and e-mail broadcast system that provides alerts and real-time information on traffic, public transport and parking availability. It also includes ticketing, booking and payment services. The city of Genova, Italy, developed a similar intermodal info-mobility platform for mobile phones. In Italy, the Brescia Mobility Channel introduced a variety of public transport services via mobile phone. The channel facilitates the search for various city services and even suggests online television programmes to entertain passengers while they wait for the bus.

Traffic information for freight

The city of Norwich, United Kingdom, investigated the traffic and travel information concerns of freight operators, which illustrated the need for a sufficient level of detail about road conditions and the added benefit of traffic information backed by other data such as the most appropriate routes for heavy goods vehicles and the locations of weight/width/height restrictions on the road network.

Parking guidance system

Donostia-San Sebastian, Spain, wanted to provide commuters lacking good public transport city connections to the city with better park and ride options. To this end, the city implemented a real-time parking guidance system that informs visitors about park and ride sites and the occupancy rates of inner-city underground car parks. Seventy-eight percent of the population assessed the measure as positive and 62 percent indicated that it helps to improve the parking situation. A modal shift towards sustainable modes of transport such as public transport and bicycling has been achieved, resulting in a reduction in car use of 0.1 percent. Traffic levels have declined as a result. The number of cars entering the CIVITAS corridor dropped by more than 7,500 per day.

Many other CIVITAS cities have integrated parking guidance systems into their parking management strategies. These can be found under the thematic category “demand management strategies”.

Learn more at www.civitas.eu/telematics/real-time