

Innovative concepts of urban mobility to face increased traffic and pollution in historical centers

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The Civitas Mimosa European project, working together with the citizens towards a new and innovative concept of urban mobility, is identifying where traffic congestion can be handled more effectively and how pollution can be reduced in the city center.

Bologna is a fast growing city and has become a very important rail, highway and airport junction. Continuing investment is planned which will ensure that the city will continue to grow causing increased traffic and [pollution](#) which in turn will lead to increased accidents involving vehicles, health, congestion and parking problems. All indicative of the need for expansion. It has a beautiful historical center, however, it is not

expandable.

The aim of Civitas Mimosa, in strict cooperation with the municipality, is to make life healthier for the residents of Bologna, particularly the vulnerable; elderly, handicapped and children, to use the city in a safe way with fewer risks from the impact of traffic, particularly cars and motorcycles in the city center, thus preserving an important historical center.

Congestion Charging

The city centre with its narrow medieval streets, will partially have automatically controlled traffic restrictions, so reducing the number of vehicles entering the limited zones. Cameras are positioned at entry points to the zones which scan the license plates. Vehicles belonging to residents, taxis and buses registered with the police are allowed in freely. All others must purchase a pass allowing them occasional access to the center or they get a fine. When a car enters, its rear license plate is filmed by the cameras, it is noted and checked against a database of registered vehicles. If the car is authorized, the photo is destroyed, if not, a ticket is issued. In parallel with this [traffic control system](#), the [public transport](#) has been improved, increasing the number of bus routes across the city using electric or methane-fuelled vehicles and a system of bike sharing has been developed in the historical center.

To reduce congestion, and to ensure the smoother routing of traffic, measures have been taken to reduce illegal on-street double parking which is a great problem to the public transport and ordinary traffic flow. This in turn reduces pollution-generating traffic jams and allows buses to run more easily. It is operated by the Intelligent Transport System where City Police officers take photographs of the illegally double-parked cars and after picture identification, the Automatic Number Plate Recognition starts the fine issuing process. A GPS/Galileo

satellite application provides the exact position of the vehicle in order to avoid disputes when the fine has been issued. People who complain after getting the fine in the mail are shown the pictures taken at the time and can see that their car was blocking traffic and illegally parked.

Car-sharing

In conjunction with these restrictive measures, the city is offering car-sharing to residents. Bicycles and cars are picked up in parking lots throughout Bologna and returned at other locations. It works by having a public transport season pass which automatically unlocks the car by swiping and gives access to the keys. This decreases of the amount of motor traffic in sensitive areas, reduces the occupation of public space by private cars, supports public transport, and discourages an occasional driver from buying a new car.

Additionally, Civitas Mimosa incorporates the payment system for car sharing into a larger system of telepayment, called Mimuovo, which is a comprehensive system that includes the use of trains and public transport as well as the car and bike sharing. It's a large-scale operation that will work with a season pass, a magnetic card for charging payments and use for other public vehicles.

Public Transport

The introduction of this new technology enables the different forms of public transport to be more efficient with increased speed and regularity on the less congested roads, and making it more competitive and attractive when compared to private transport. This improves the quality of the environment by reducing the impact of [traffic](#) in the city.

With 25% fewer cars in the center, the people of Bologna are already

enjoying a calmer and less polluted urban space with the move to sustainable public transport which has been awarded the Civitas 2010 prize.

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