



**CIVITAS**  
Cleaner and better transport in cities  
**RENAISSANCE**

# CASE STUDY



## TOWARDS VIRTUAL MOBILITY IN PERUGIA

### DEMAND MANAGEMENT STRATEGIES



Due to its geographic position and characteristics, the historic city centre of Perugia is not easily accessible. However, all of the main public bodies and their offices are located within the city centre where, prior to the implementation of the measure, citizens were obliged to go to in order to deal with administrative issues. The objective of the trip avoidance strategy scheme was to design internet accessible public services, reducing travel needs, and lowering the environmental impact, providing both citizens and socially disadvantaged groups with easier access to services. The Municipality of Perugia also benefited from a reduction in time needed to complete administrative tasks.

### Municipal context

Perugia is the capital city of the Umbria region in central Italy, a major educational and medical centre and also a host to many famous international festivals. It is a classic example of an Italian fortified hill-top city. Due to its geographic position the city centre is not easily accessible. To solve this problem, the City of Perugia has planned, over the years, an innovative and sustainable transport system using advanced solutions to enhance accessibility. These included the development of several parking areas, along the

medieval wall of the town, and of escalators and elevators to access the city centre. An automatic environmentally-friendly light metro system, serving most of the medieval city from the outskirts, was also introduced.

The new system is integrated with the traditional transport system, and it is designed to encourage a cultural change in reducing car use and promoting intermodality and alternative modes of transport to the private car.

#### MUNICIPAL PROFILE

**LOCATION**  
Perugia, Italy

**POPULATION**  
167,000

**LAND AREA**  
450 km<sup>2</sup>

**CIVITAS BUDGET**  
EUR 2,704,508



## PERUGIA IN CIVITAS

Perugia participated in CIVITAS RENAISSANCE. Under the motto of “Testing Innovative Strategies for Clean Urban Transport for historic European cities”, the project connects five cities that face mobility challenges through seasonal tourism: Perugia (Italy), Bath (UK), Gorna Oryhavitsa (Bulgaria), Szczecinek (Poland), and Skopje (Macedonia).

## PROJECT INFORMATION

CIVITAS RENAISSANCE aims to demonstrate how the legacy of the renaissance can be preserved and developed through innovative and sustainable clean urban transport solutions. The project aims to test and develop a valuable, reliable and integrated package of mobility measures that will make historic cities cleaner and safer.

## READ MORE AT:

[www.civitas.eu](http://www.civitas.eu) > About us



Administrative offices in the city centre, accessible only by PT

## Introduction

Perugia committed to extend the vision developed within the city’s Urban Mobility Plan into further areas. CIVITAS RENAISSANCE gave the city the chance to enforce its mobility vision for a cleaner, more sustainable mobility environment

The new trip avoidance strategy of Perugia is based on the promotion of internet-based services that allow citizens to deal with administrative issues from their homes.

The expected benefits of this measure include a decrease of number of cars circulating, CO<sub>2</sub> emissions, fuel consumption, money and time, and an increase in efficiency of service delivery system.

## Taking a closer look

The implementation of the scheme in the city of Perugia has been articulated in four main phases:

### Research and analysis

First of all, ex-ante data on visits to the Municipality of Perugia website and on the most requested services were collected. Then, an analysis of the services that could be offered online was carried out. Once the new online facilities were selected, meetings were organised with key stakeholders

(citizens associations, professionals, technicians, employees).

### Implementation

Technicians of the Municipality of Perugia were involved in designing the new architecture of the system. Market research was carried out to identify the best software to host the new services, which was then tested through a trial period and finally implemented.

### Evaluation

An evaluation methodology was developed in order to calculate average values for the impact produced by the scheme in terms of car trips, emissions, fuel, money and time saved.

In addition, special campaigns were carried out to assess acceptance and awareness levels of the scheme. They included online questionnaires addressed to internet users; paper questionnaires addressed to citizens visiting the offices; paper questionnaires for employees involved in the daily management of the facilities and for technicians that created the facilities.

### Dissemination

The new online services were promoted through information material (brochures and postcards) available in the municipal offices, through the media (journals, local TV, CIVITAS newsletter) and on the Municipal website. The results of the

measure were shared with other public bodies in order to exploit them and to promote ICT use for a more sustainable city.

## Results

The “trip avoidance strategy” scheme implemented, was a success. Within a short time, the new services have been well accepted and widely adopted by citizens, producing almost double the expected results in terms of car trips avoided as well as reduced air pollution, fuel, time and money saved.

The employees of the Municipality confirmed they were satisfied with the innovations in their work, and citizens involved in survey campaigns were appreciative of the chance offered by web facilities, and requested the local authority to expand the supply.

The most important results in 2011 include:

- 26,466 hits for the new web facilities;
- 6,748.83 car trips avoided;
- 10,325.7 kg of CO<sub>2</sub> emissions saved;
- 3.050,44 litres (petrol car) and 1,553.3 litres (diesel car) of fuel saved;
- EUR 19,309 (petrol car) and € 11,534.4 (diesel car) saved;
- 3,487 hours saved (time for car trips);
- 2,843 web users interviewed (45.5 percent use the facilities frequently, 56 percent consider



the facilities “useful”, 93.5 percent would like to have other web facilities)

- 800 citizens interviewed in the offices (44 percent already knew the web facilities, 56 percent still didn't know the web facilities but 74 percent of them declared to be ready to use them).

Moreover, positive feedback were collected from the employees involved in the use of new web facilities, who recorded an improvement in the quality of work and better services for citizens.

### Lessons learned

The more online services are available, the greater the benefits of the acquired knowledge, trust and culture of their use. To stimulate a real cultural change it is necessary to expand as much as possible the online supply of services.

Using internet technology for avoiding the need to travel requires a special attitude. Cultural changes are difficult for people who prefer continuing to use the old system, especially for those less qualified or for the elderly. It is therefore important to provide free training courses to enable them to use the internet. Equally important is to ensure a “helping hand” (online and over the telephone) to assist them when they encounter problems using the online services.

Moreover, a fundamental aspect to be developed and faced by local authorities is the ease of access and availability of information through the website. With regard to the issue of the possible ‘social exclusion’ barrier to e-government, internet access should be widened at the national level by the central government in order to make IT use easier for citizens (though initiatives such as web portal restyling, and Wi-Fi days in order to provide better, faster and free web access for citizens).

Furthermore, to meet citizens' needs it is recommended to involve stakeholders from the outset, collecting suggestions and demands. Depending on the service to be provided, it is recommended to involve the most affected categories in focused meetings, to present them the opportunities offered by internet facilities, and also to adapt the online facilities to the user needs.

### Upscaling and transferability

Considering the good feedback and impact of the scheme, the Municipality of Perugia is planning to further develop IT applications to increase the number of web based services.

Perugia wants to improve the quality of its official web site, meeting users' needs and providing services and information in a socially inclusive manner. The portal restyling carried out by the Municipality is expected to provide several advantages, such as:

- easier management of multimedia publication procedures;
- introduction of social networking facilities and sharing tools (web applications that facilitate participatory information sharing, interoperability, user-centred design and collaboration on the World Wide Web);
- interactive facilities for users;
- easy, safe, steady, quick internet surfing;
- advanced management of information architecture.

In terms of transferability, the scheme may be replicated with best impact in cities with high traffic flows caused by reduced accessibility of strategic areas. More specifically, cities with medieval urban structures often host offices and public bodies in the city centre, which is the most attractive area of the city. Therefore, these types of cities are the most suitable for the implementation of such a scheme. This type of initiative can also have a particularly useful role for cities that have a high presence of cultural heritage requiring preservation in the city centre.



### Key contacts

Viola Ancarani  
[v.ancarani@comune.perugia.it]  
Tel: +39 075 5773092  
Municipality of Perugia



### Acknowledgements

This publication is produced under the auspices of CIVITAS VANGUARD, a Support Action for coordination and dissemination funded through the EC's Seventh Framework Programme for Research and Technological Development. VANGUARD stands for Advancing Sustainable Urban Transport in an En-larged Europe through CIVITAS.

### Legal notice and copyright

The views expressed in this publication are the sole responsibility of the authors specified and do not necessarily reflect the views of the European Commission or the CIVITAS VANGUARD Initiative.

All text in this publication is based upon experiences gathered by the CIVITAS Initiative. All text and images can be republished in their current or adapted form, however, in either case, they must be attributed to the CIVITAS Initiative.

### Publisher

ICLEI – Local Governments for Sustainability,  
Freiburg, Germany  
Executive Director: Wolfgang Teubner

### Series editors

Sean Carroll  
Ciara Leonard  
Gloria Spezzano (ICLEI)

### Layout

Mostra, ICLEI

