



POLICY LEARNING IN INFORMATION TECHNOLOGIES
FOR PUBLIC TRANSPORT ENHANCEMENT

GOOD PRACTICES – PUBLIC TRANSPORT FLEET MANAGEMENT SYSTEMS

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TRAFFIC MANAGEMENT DURING BIG EVENTS

General information

Description

City of Perugia has been working on mobility issues since 70s years taking in consideration its particular historical and touristic vocation. They created a suburban parking system with connections to the city centre. During last years the connection between parking areas and the city centre was implemented thanks the Minimetron system.

Minimetro is an environmental and innovative transport system which connects in 12 minutes the parking areas “the Valley of Pian di Massiano”, to the city centre. The parking area capacity is about 2800 cars.

This transport system (considered as a strong urban public transport corridor) has provided an opportunity to implement a tourist flows management, and the Minimetron is now considered as the principal access mode to the city centre in Perugia.

Concerning the mobility management the City of Perugia set up, some years ago, a Central Monitoring System developing and monitoring the road network.

Background and Context

In order to solve the traffic congestion problems related to the big events that take place in Perugia annually (Umbria Jazz and Eurochocolate are the bigger ones) the City decided to organize a suburban parking system. Thanks to this system it is now possible to keep cars away from the city centre.

Connections to the city centre are possible thanks to the Minimetron.

After years this system is on duty daily and not only during big events.

Policy design details

Policy Design Steps and Timing

The Minimetron system and park & ride areas were born in 1998, thanks to an agreement among the Italian Ministry of Transport, Umbria Region and the Municipality of Perugia.

Actors Involved

Municipality of Perugia, Umbria public transport company "Umbria TPL SpA and Mobility" and Minimetro SpA (Company created by Municipality of Perugia).

Decision Making Process

On April 1998 there was the creation of the 'company Minimetro' SpA from the Municipality of Perugia, joint-stock company with most public capitals. The task of this company is to design, build and operate a light rail, called Minimetron as innovative and alternative Public Transport with the path Pian Massiano - Monteluca, for a total length of 3.863,2 meters.

At the same time, the private shareholder of the Company mixed public-private partnerships were identified by the Perugia Municipality through a public tender (April 1998), with the adoption of two fundamental acts: the resolution of the City Council no. 71 of 20 April 1998 and no. 324, April 21, 1998.

The agreement signed on 12 December 1997 among the Ministry for Communities and Local Government, the Ministry of Transport and Navigation, The President of the Regional Government of Umbria and the Mayor of Perugia, granted to the city of Perugia the 50% of the construction cost of the light rail first section: Pian di-Massiano Piazzale della Cupa.

During the years the path of Minimetron was extended in accordance to General Plan, and to Environmental Impact rules.

Implementation details

Implementation Steps and Timing

Part of steps have been made since 1998:

- Modeling of the road network (software VISUM and AIMSUN) made with composition analysis of flows and isochrones;
- Urban Traffic Controller – UTOPIA, a system for flows optimization, based on prioritization for transit (special vehicles, PT) traffic signals at intersections;
- Integrated Platform Infomobility (MISTIC), which provides the middleware (program income) required to validate and synchronize the information and data provided by the connected systems, monitoring the state of the road network;
 - Calculation of the optimal distribution of traffic inside the network;
 - Development and update the matrix o / d;
 - Determine the actual availability of the road network;
 - Provide for the distribution of traffic flows in the entire area under control;
 - Development and publish media information for road users;
- Implementation of minimetro (year 2006).

ICT/Infrastructures needed

Construction of the minimetro rail and installation of variable message signs (VMS) at bus stops to show the availability of car parks.

Human Resources

Employees of:

- Municipality of Perugia;
- Umbria company public transport "Umbria TPL SpA and Mobility";
- Minimetro SpA.

Monitoring Procedures

Using modeling software of the road network (VISUM and AIMSUN) and data from Integrated Platform Infomobility (MISTIC).

Supporting Mechanism

Awareness/Information Campaigns

Information campaigns on PT (trains, buses and minimetrò) with fare integration, mobility, parking and LTZ.

Partnerships/Key Supporting Stakeholders

Municipality of Perugia, in cooperation with Umbria company public transport "Umbria TPL SpA and Mobility" and Minimetro SpA.

Results

Expected vs Actual Benefits

Report the main benefits of the PT policy was expected to delivery during the planning stage and describe how the actual benefits compare.

Quantitative Results Achieved

Through introduction of Minimetro and car parks outside the city center, with LTZ, estimated savings in terms of polluting emissions is approximately 55% per year.

UTOPIA System - results:

- 15% reduction of travel time;
- 50% reduction of queues;
- 10% savings in terms of emissions and fuel consumption in urban areas.

Qualitative Results Achieved

Improvement is perceived in various contexts:

- Environmental (reduced noise and emissions);
- Less traffic congestion and increase road safety;
- Cheap (payment available at parking area);
- Planning (via the data analysis of traffic and use of public transport it is possible to design new infrastructures).
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Key Considerations

Lessons Learned

It is possible to reduce the traffic congestion and manage the PT also in particular cities.

Primary Obstacles

The biggest challenge was to create a public transport system overcoming the barrier of the historic city, making it environmentally friendly and suitable to host big events, such as Umbria Jazz or Eurochocolate.

Critical Success Factors

Installation of “Minimetrò” has been important in order to promote the use of suburban car parks; in Perugia there are various points escalators and elevators, to overcome many architectural barriers existing.

Transferability Considerations

All the actions from Perugia are potentially transferable to other cities, obstacles are the lack of financial sources and the citizens consensus.

Contact

Arch. Leonardo Naldini – Municipality of Perugia,

e-mail: l.naldini@comune.perugia.it, Web site: www.comune.perugia.it