The CIVITAS Initiative is a European action that supports cities in the implementation of an integrated sustainable, clean and energy efficient transport policy. Lessons learned during the planning, implementation and operation phases of the activities are summarised in twelve Policy Advice Notes and give an idea on how to cope with urban transport problems which cities of the European Union have to face in the future.
Integration of parking and access management

Improving the living quality of urban spaces in sensitive areas of the city

Since 2002 the CIVITAS Initiative is co-funded by the European Commission and has helped cities to achieve a more sustainable, clean and energy efficient urban transport system by implementing and evaluating an ambitious, integrated set of technology and policy based measures. Within CIVITAS II (2005–2009) several measures were implemented aiming at reducing private car traffic in environmentally sensitive areas of European cities. Key issues concerning the implementation of these measures and cities’ experiences are summarised in this Policy Advice Note in order to support and inform local politicians and other decision-makers interested in these actions.

Overview

DESCRIPTION OF THE MEASURES

The reduction of private car use in urban areas should be fostered in each city to enhance living conditions as well as to minimise congestion. The goal can be achieved by the development of regulations for the access and parking of cars in sensitive areas of the city, such as:

1. Restriction and regulation of parking space (e.g. by use of permit systems)
2. Pricing of parking spaces
3. Restriction and regulation of access to sensitive areas (like historic city centres) for different user groups
4. Pricing schemes for accessing sensitive areas
5. Definition of Low Emission Zones where only vehicles, which meet defined emission standards, are allowed
TARGET GROUPS

The main target groups are the citizens living in the restriction area and local business (restaurants, pubs, small retail and other local services) affected by the measure directly. Additionally, the measures are aimed at trying to influence people working in the restriction area (but living outside) or other visitors who want to access the restriction area by car.

IMPACTS AND BENEFITS

Introducing parking or access management in a city results mainly in an increase in the living quality of the city due to less private car traffic on the roads. The following benefits are possible:

For the public
- Improvement of air quality by reducing pollution caused by motorised traffic (particulate matter, carbon monoxide, nitrogen dioxide etc.)
- Reduction of noise and congestion due to less motorised traffic
- Less congestion due to traffic searching for parking places
- Enhancement of traffic safety
- Increasing the mode share of walking, cycling and public transport
- Attraction of public transport due to the increase of bus travel speed and reliability in the absence of congestion
- Improved accessibility for soft mode trip generators, e.g. schools, where pupils often come by foot or by bicycle
- Better preservation of and access to cultural heritage sites
- Generates revenue (from permits or fines) for the city to improve the transport system favouring sustainable modes

For individuals
- Improved health and living conditions for residents due to less individual car traffic (especially regarding safety of children)
- Enhanced urban amenity and increased satisfaction of customers, who like to go on shopping expeditions in pedestrian friendly shopping streets
- Improvement of the amenity values for workers and visitors

For companies
- Support of local trade by enhancing the attractiveness and the cityscape of an area
- Reduction of the number of vacant shop units and apartments is possible
FRAMEWORK CONDITIONS FOR SUCCESS

A clear pre-requisite for the successful implementation of parking and access management is the existence of severe problems like congestion and/or a lack of parking spaces in the city or parts of the city. It is advisable to implement such measures within areas in which different uses are overlapping and competing (e.g. areas with a mixture of commercial, touristic and recreational uses, where the need for parking spaces is high over the whole day). Additionally, it is important that the appropriate legal framework at national level is established, especially concerning the control and enforcement of the regulations as well as the introduction of low emission zones.

Implementation steps and timeline

When implementing a program for parking or access management, several important considerations must be taken into account, including supportive measures and setting a reasonable timeline.

WORKING STEPS

1. Information required
   • Analysis of the current traffic situation (trip generation, parking situation, congestion, sensitive areas, attitudes of the citizens, etc.).
   • Examination of the latest technical developments and proven technology solutions
   • Analysis of the potential impacts
   • Exchange experiences with other cities at an early stage of the planning process. Alignment of access conditions between cities can be mutually beneficial, enabling development of standardised equipment and joint procurement
   • Analysis of whether the current legal situation conflicts with the measure. If necessary, new legal regulations need to be defined.
   • Collection of public opinions about restrictive measures in order to design appropriate implementation strategies and information campaigns

2. Start communication
   • Identify stakeholders and start consultations with all relevant stakeholder groups
   • Establish the communication with appropriate city departments and other municipalities at an early stage of the process in order to obtain political agreement
   • Inform the citizens about the traffic problems and the potentially positive effects of the measures
3. Concept design
- Definition of general goals (e.g. more parking turnover, minimise negative impacts of motorised vehicles in the city centre, elimination of particular types of vehicles) and checking the coherence of these goals with transport strategy and other strategic documents (i.e. general spatial plans)
- Ensuring political support of local authorities (e.g. support of majority)
- Develop a work plan and a specific strategy (e.g. administration and enforcement system)
- Define restriction criteria for different classes of vehicles (goods transport, clean vehicles, tourist buses, taxis etc.) and/or user categories (residents, shopkeepers, delivery, etc.) allowed to access or park in the restricted area
- Start to define the kind of different permits (temporary, permanent, personal, linked to vehicles) and the adequate enforcement thereof (it is important not to allow too many exceptions)
- Select an appropriate technology for recognition and enforcement (low tech/high tech) and/or physical infrastructure and control mechanisms (bollards, software, cameras, cards)
- Decide about the business model: Should the implementation and operation of the measure be outsourced or should it be accomplished an in-house?
- Thoroughly analyse the impacts of the planned measures on road traffic and ensure that the capacity of the peripheral routes and parking facilities outside the restricted area is sufficient to absorb the deflected vehicles
- Ensure adequate public transport service in the restricted areas
- Identify the geographic area for the measure in close co-operation with all stakeholders.
- Discuss the tariffs and the use of the revenues (different use for charges and fines)
- Define adequate measures to avoid increased on-street parking in the neighbouring areas (e.g. through park and ride)

4. Implementation
- Introduce the management measures and inform the inhabitants about the new regulations as well as about alternative routes and parking facilities outside the restriction zone (information point, static signage, GPS, internet, media)
- Inform the public about the use of the revenues
- Organise training courses for a sufficient number of staff (e.g. police) to be able to control parking and/or accessing cars in the restriction area
ACCOMPANYING MEASURES TO AMPLIFY POSITIVE EFFECTS

The positive effects of the measures can be enhanced by promoting alternative modes like public transport, cycling and walking. These modes should be supported by implementing safe pedestrian and cycling zones as well as pedestrian priority schemes, by the replacement of pedestrian underpasses with new signalled surface-level pedestrian crossings, wider footways and cycle lanes etc. wherever possible in the city. It is advisable to develop the restricted area as a focus of soft transport modes and, therefore, to offer special services like public bicycles, bicycle stands, cycle repair or tyre inflator stations. It is also advantageous to introduce traffic signal green waves for cyclists and pedestrians, count down signals and others. The accessibility of the affected area by public transport should be improved (construction of bus lanes, public transport priority schemes, more public transport stops, introduction of newer vehicles etc.). Additionally, car-pooling and car-sharing systems can ensure the accessibility of areas decreasing the dependency on a private car, if these vehicles are exempted in restriction zones.

For individual motorised traffic it is important to offer route guidance to ensure that the areas can be circumnavigated and that appropriate parking facilities (also park and ride) can be found without causing additional traffic. Guidance and regulations for freight delivery in the affected areas are also essential (e.g. night delivery or urban distribution centre).

TIMEFRAME

Analysing the current traffic situation of the area concerned normally takes about 12 to 18 months. Depending on the size of the area and the system planned, the development of a parking or access management concept can take nine to 12 months or more as the concept has to be developed carefully considering the interests of all stakeholders concerned in order to identify a suitable and adequate area for the measure. Some benefits will be immediately visible after implementation, such as the reduction of through traffic. More time will be needed to ascertain economic and air quality trends.

Concerning the time for implementation the following experiences were made within CIVITAS cities:

- In Norwich (United Kingdom) it took two months to introduce a restricted access for private motorised traffic to two city centre streets during the hours of maximum pedestrian activity (between 10 a.m. and 4:30 p.m.)
- In Toulouse (France) a new parking management policy was introduced in six areas of the city. The realisation phase of this measure was started in the eighth month of the measure and it was finalised in month 36.
What are the investments involved?

A comprehensive transport analysis on traffic flows and the current parking situation, as well as the development of a concept for a restriction scheme, have to be financed. Moreover, cost for an attitudinal survey among the residents has to be considered. Once the concept has been approved, budget is needed for additional infrastructure and equipment like permit payment machines, monitoring systems, signage and the installation of this hardware. For example, in La Rochelle (France) three access control zones were equipped with rising bollards, cameras and other equipment. This measure cost not more than EUR 300,000.

Operating costs (staff for controlling, maintenance of payment machines, administration) is dependent on local wage rates usually paid. The measures described are cost intensive but the investments can be offset by revenues gained from parking or from the access management system as well as by fines associated with illegal parking or access. Revenues can also be obtained by renting public spaces within the restricted zones that are redesigned as pedestrian-friendly and available for restaurants, cafes and small businesses. For example, in the summer of 2008 in Ploiesti (Romania) EUR 6,600 were earned from restaurants and businesses using the free street space.

Main drivers that serve as precursors to success

The factors listed below are the main drivers for the initiation as well as for an efficient and successful implementation of the measures described above:

- Compatibility of the measure with the overall transport policy of the city
- Presence of a “champion” for the measure, such as the mayor of the city or/and a political majority in the city council who have the power to accelerate decisions
- Cooperation of politicians, administrators, departments of transport, environment, infrastructure and town planning as well as the police approving and managing the implementation
- Media campaigns reporting about the living conditions and potential benefits in certain areas
- Good public transport coverage across the area concerned and public transport authorities and operators who are able to maintain better service reliability with less congestion
- Schools, which want to enhance the accessibility to the area by soft modes
- Well-developed park & ride facilities
- Detailed and extensive consultations with the public and businesses, to make clear for the stakeholders that the measures enhance the attractiveness of the area concerned and that they support the local trade
- Secured financial resources (e.g. by putting the measures on the “city development strategy” for which valuable governmental and European funding can be claimed)
- Offering various possibilities to pay tariffs (e.g. online, by mobile phone, etc.)
Strategies for a successful implementation

All work phases have to be accompanied by discussions and working group meetings to identify barriers in advance and to react on problems immediately.

Political Support
Politicians might not support the measures sufficiently due the negative perceptions of stakeholders, residents or shopkeepers (especially close to elections). Therefore, it is crucial to involve all affected interest groups in planning and decision-making at an early stage. Moreover, meetings with stakeholders and concerned persons should be organised regularly from the very beginning in order to discuss critical factors, potential benefits and to explain how the measure can positively impact the area. Studies showing the positive effects on living quality as well as showing a high level of public support are helpful.

Acceptance
Introducing restrictive measures might evoke a negative reaction from residents and economic interests. In many cases, lobbying against the actions takes place. One way to overcome this negative attitude is to show the benefits of the scheme to the particular groups of people affected. Therefore, a comprehensive communication strategy should be developed. To assure that the visions and goals of the stakeholders are consistent with those of the project managers and planners, both groups have to work together closely to consider the different views and create a common vision. For example, the city has to work together with the business associations and should acknowledge their concerns that drastic increases of fees could have negative impacts on different businesses in the city. New tariffs have to be considered acceptable by important stakeholders. Furthermore, it is important to have a clear strategy as to how the new regulations will be enforced (e.g. by the police or by an electronic identification system).

In order to reduce negative perceptions of the measure, it is advisable to introduce elements that improve accessibility by public transport or other sustainable modes at the same time. Such improvements should be presented as integrated with the restriction measure. Effective promotional strategies are a key element to this end.

Financial management
To assure that the required resources for setting up the measures are provided, a resolution of the local council is necessary. If parking management measures are implemented, they are usually self-financing and even generate additional revenues for the city. It should be clarified, however, how the net revenue will be allocated.

It is crucial to set up a business plan, in which sources of finance are identified. A financial management structure should be created to resolve conflicts of interest as well as control finances.
Legal framework condition
A lack of legal regulations and definition of limit values for emissions at the national level might be a barrier for implementing access restrictions based on automobile emissions. It is recommended that the EU-wide regulation specifying vehicle emission classifications be used as national standards. Also, vague legislation regarding public space, access control or limited access rules can hamper the implementation of the measures. In this case, it might be necessary to develop city-wide rules by the governing public administration to be approved by local elected officials.

Institution & Organisation
Strict and slow administrative processes for obtaining the needed authorisations can hamper the creation of the development plan. The process cannot allow residents to lose interest in the project and become unsure about the future of the measure. Public and private entities (e.g. public transport and car park operators) have to cooperate in order to find a common fee strategy, even if they have different interests. Shopkeepers and residents have to be intensively involved in the processes as they are often worried about access to shops and about losing customers coming by car.

KEY ELEMENTS TO BE CONSIDERED
• Good public transport coverage across the area concerned has to be available to ensure accessibility
• Cooperation between the city and business associations is crucial. Concerns that drastic increases of fees could have negative impacts on different businesses in the city should be acknowledged. New tariffs have to be considered acceptable by important stakeholders.
• It is important to have a clear strategy to enforce new regulations
• It can be necessary to develop city-wide rules concerning public space, access control or limited access rules

Who are the key people to be involved?

STAKEHOLDERS
Restrictive actions always cause controversial discussions between different groups. Therefore, it is crucial to involve all stakeholders intensively from the very beginning of the planning process:
• The public (residents of the target area, employees affected at workplace, visitors who come for education, shopping, leisure or tourism). They can be supportive for the measure if they are aware of air and noise pollution in the areas that they live or work and if they are unsatisfied with the current traffic situation (lack of parking spaces, congestion, unsafe conditions, etc.)
• Road directorate (e.g. for the permissions concerning the physical layout of restrictive zones)
• National railway administration, if the railway station might become an important element for offering park and ride facilities
• Motorist advocacy groups
• Local and regional businesses (shopkeepers and commercial as well as transport operators, delivery groups and haulage industry) are often in opposition to the measures and can make a scheme fail, but if they are involved and support a scheme, both public and private sector can benefit
• Public transport operators and local interest groups or initiatives (e.g. for elderly, disabled persons, cycling and walking groups)
• Local media

Stakeholders can be invited to “roundtables” which should take place during all planning and implementation phases in order to avoid critical situations and barriers later on. Press conferences, public events and surveys with citizens should be initiated to explain the background and the advantages of the measure, to raise awareness and to gain information about potential improvements.

**MAIN PROJECT PARTNERS**

The involvement of the following partners is critical to the successful implementation of the measures for parking or access management:

**Decision makers**
• Local and regional administrators usually assume a leadership role
• Politicians in order to ensure political support
• Public enterprises or transport operators

**Operators**
• Police or other traffic control organisation responsible for the enforcement of the scheme
• Private operators contracted by the local authority or city company
• Public transport operators can be involved in the case of park and ride operations and to adjust the service within the restriction zone

**Financers**
• The initial expenses for the measure are mostly borne by the local or regional administration, who should also be responsible for the financial management
• If service providers for monitoring, enforcement and charging are involved, financial services or credit card agencies should be responsible for the payment system, road charging and back office activities

**Others**
• Housing communities and housing administration in the area
• Organisations of local business located in affected area
• Non-governmental organisations (e.g. bicycle advocates, ecology groups)
• Schools and kindergartens (teachers, children with parents)
Enumeration of practical examples from CIVITAS II

Within CIVITAS II 14 cities have implemented measures dealing with access restriction and parking management:

**Burgos (Spain):** Integrated access restriction strategy; Parking strategy and management

**Debrecen (Hungary):** Access and parking management and accessibility scheme for the conference centre and pedestrian zone

**Genoa (Italy):** Integrated access control strategy and road charging scheme

**Krakow (Poland):** Enforcement of access restrictions and integrated access control strategy

**La Rochelle: (France):** Design of access control scheme for tourist buses and extended access control zones

**Malmo (Sweden):** Extended environmental zone for heavy vehicles and enforcement

**Norwich (United Kingdom):** Introduction of Low Emission Zone; Time controlled access restrictions and priority access scheme for clean goods vehicles

**Odense (Denmark):** Implementation of environmental zones

**Ploiesti (Romania):** Development of a clear zone

**Preston (United Kingdom):** Air quality assessment and clear zone strategy; Development of clear zones and extended pedestrianisation as well as traffic regulation through access control

**Stuttgart (Germany):** Policy options for access restrictions

**Suceava (Romania):** Extension of low emission zone

**Toulouse (France):** Definition and implementation of a new parking management policy

**Venice (Italy):** Access management for the city centre and parking management strategies

GET MORE INFORMATION ON WWW.CIVITAS.EU
The CIVITAS website contains information about CIVITAS-related news and events. It provides an overview of all CIVITAS projects, CIVITAS cities and maintains contact details of over 600 people working within CIVITAS.

In addition, you get in-depth knowledge of more than 650 innovative showcases from the CIVITAS demonstration cities.

Visit the CIVITAS website and search for prime examples of experiences in sustainable urban transport currently being undertaken in cities. If any of the ideas suit your city, or you are just interested in learning more, you may then contact the relevant person responsible for this measure.