

Guideline **SUSTAINABLE PARKING MANAGEMENT**



Parking management is a powerful tool for cities to influence transport. By managing the supply, design and price of parking spaces, cities can exert a high level of control over the traffic flows and quantities. In the past municipalities merely expanded parking supply in order to attract more and more cars. Contemporary parking policies have a more balanced view, include social and environmental goals and want to improve the quality of life in cities.

In the past decades car ownership in Europe has increased constantly. Many cities found themselves drowning in traffic and took careful steps to limit congestion. By putting a price on entering the city by car, cities can reduce the number of vehicles driving around and at the same time create money they can use for sustainable transport. And crucially, decreased traffic volumes directly affect air pollution levels. Last but not least, parking spaces use up a

significant share of valuable inner city space. The ground on which they stand is expensive and scarce. And cars are only used for a small amount of time and stand around for 23 hours a day. Overall, cars are also decreasing the life-quality of a city, with the space they use as well as with their emissions.

Appropriate parking management is able reduce the number of necessary parking spaces, balance



out supply & demand and produce a long list of co-benefits. This paper deals with a couple of factors which should be taken into account and shows a number of examples of successful parking management.

Setting up managed parking

Parking management requires several important factors: Setting up parking zones, addressing their specific needs, setting appropriate price levels are just a few of them. A city needs to evaluate its successes and improve where supply and price levels have not been well balanced.

Parking Prices

There are of course rather different requirements for a parking zone. Residents after all, have diverse requirements to their neighbourhoods as do visitors and tourists. However with the use of zone pricing price rates can be adequately structured. Congested areas necessitate higher prices, nearby areas with excess capacities can be made more attractive to longer-term parkers by lower parking fees.

Paris

Paris was a car-centric city for decades, but in recent years has taken considerable steps towards less car traffic in the inner-city.

Since 2003, the city reduced the on-street parking supply by 9%. At the same time, 95% of free parking spots were transformed to paid parking spaces. In combination with other measures, this led to a vehicle kilometer reduction of 13% and the share of private vehicles in the modal split decreased from 68% to 60% between 2003 and 2006.

Parking Supply

Besides setting a price on parking, managing the amount can have remarkable effects as well. For a long time already, European cities have increased their attention to the number of parking spaces actually available. By carefully reducing the on-street parking supply, cities gain valuable space and thus life-quality. At the same time they increase the value of the remaining parking spaces.

For example, cities may set caps on the number of parking spaces in your city. Or they might review the minimum parking requirements for new housing projects.

Emission-based parking prices

Several boroughs in London as well as Amsterdam have established parking fee schemes based on vehicle emissions classes. Where prices have a direct influence on decisions, tying economic incentives to environmental targets will accelerate the transition to cleaner transport. The downside is that systems like these are more difficult to administer. Still, emission-based parking makes great deal of sense.

Earmarking

Parking fees generally generate revenue. So why not think about earmarking them. These revenues can be used to directly finance a certain budget item, let's say investments in sustainable transport. The city of Barcelona has done so, earmarking 100% of its parking fee revenues for the city's bike sharing scheme. Allocating parking fees to sustainable transport measures will increase public acceptance and understanding.



Repurpose your parking spaces

European Cities experience a rapid introduction of shared mobility solutions. Paris, for example, has removed parking spaces to create spaces for its then introduced bikesharing-scheme Vélib'. Equally important are parking spaces for car-sharing schemes, or zero-emission vehicles as part of their promotion. And last but not least, Park&Ride concepts have great potential in making vehicles not entering the city.

Urban Planning

Cities should grow in such a way that new land-use projects also are checked for their parking space planning. Instead of relying on connection to the city by cars, they should be well connected by public transport.

Other crucial factors

There are a number of other issues that need to be taken into account whilst developing a parking policy:

- Concern by local businesses on economic viability
- Concern by community of over spill of parking into residential streets
- Appropriate parking rates for land use
- Opportunities for reductions in supply due to mixed land uses
- Market and community acceptance
- sufficient level of provision of parking for increasing demands

Commuters

An important parking management approach is addressing the mobility decisions of commuters.

Copenhagen

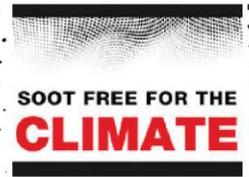
Copenhagen's parking strategy targets a reduced commuting into the city by car, alongside the improvement of the parking conditions for its citizens. Since the 2005 parking strategy, on average parking charges were raised by 50%. Copenhagen's strategy included increased effectiveness of the parking supply, higher price schemes for resident permits, a shift from on- to off-street parking. In combination these policies led to a decrease of the inner city car traffic by about 8%. Almost 50 % of commuters go to work by bike.

The city may choose different options. It could address the commuters as the main interest group in your parking policy and price business districts accordingly. Or it could make companies responsible for the parking spaces of their employees. Some do that and charge companies for their parking spaces.

Other approaches involve the companies in the planning process. They might support work programmes that promote not commuting by car or car-pool.

Obstacles

The role of technology in parking management is increasing and opens possibilities for precise parking management solutions. Networked meters, the use of telecommunications and real-time information that supply's car drivers with up-to-date information about their chances to find a parking space. Cities choose the solutions that fit their needs and budget.



Amsterdam

Amsterdam has a highly technological approach in managing its transport. It has a database with car plate numbers that are linked also to emission information. The city scans car plate numbers and cross-examines the information with its database. In its city centre, Amsterdam charges some of the highest fees worldwide. There are interesting housing regulations, requiring the removal of on-street parking for parking place created off-street.

Further thoughts

Cities increasingly identify zones where parking is less desirable and convert streets and parking spaces into space used for public transport, sustainable transport or other purposes. There are great examples.

Use physical barriers to limit parking possibilities, i.e. with lines, bollards and other means. Reallocate parking to less desirable locations, increase the walking distance to the parking lot.

Summed up

- Adjust parking management approaches to your specific situation and needs.
- Make a comprehensive analysis addressing all costs and benefits.
- Parking demand and supply need to be balanced based on detailed knowledge.
- Holistic and multidimensional urban planning, comprising transport AND development planning.
- Also analyse the impact of large development projects on transport systems.
- Shift from on-street to off-street parking. Thus parking spaces have to be created by the private sector or incorporated into housing.
- Involve large stakeholders into the process.
- Participation and Transparency.
Information & Marketing.



Further information:

- ITDP, Europe's Parking U-Turn: From Accomodation to Regulation, 2011, online 9/2013:
- http://www.itdp.org/index.php/news/detail/european_parking_u-turn_reaps_rewards_ideas_for_the_rest_of_the_world/
- Todd Litman, Parking Management Comprehensive Implementation Guide, Victoria Transport Policy Institute, online 9/2013
- Todd Litman, Parking management Best Practices, Planners Press, 2006

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ABOUT US

Clean Air is a project by nine European environmental organisations that fight for clean air in European cities. Despite the existing legislative framework and the citizens' right to clean air, continuing violations of air pollution limits remain a problem in many cities. Air pollution threatens health, environment and climate. It's time to take action!

www.cleanair-europe.org

Started in 2009, the associated campaign "Sootfree for the Climate" aims to reduce diesel soot emissions, which accelerate climate change and pose a threat to public health. To this day twelve European NGOs have joined the campaign.

www.sootfreeclimate.org

a project by



project coordination

co-financed by the
EU's LIFE financial
instrument



associated
campaign

