



The Core-Funding Mechanism between parking space management and sustainable transport measures and concept for establishment of a self-sustaining process.

PUSH & PULL – Deliverable 2.4

Coordinator: Robert Pressl Austrian Mobility Research FGM-AMOR pressl@fgm.at +43 316 810451 13	Authors: Tom Rye TRI Edinburgh Napier University t.rye@napier.ac.uk +44 131 455 2807 Robert Pressl Austrian Mobility Research FGM-AMOR pressl@fgm.at +43 316 810451 13
Version 1 – July 2015	
Start date of the action: 01/03/2014 End date of the action: 28/02/2017 Duration: 36 months	Project website: http://www.push-pull-parking.eu
Grant agreement no. IEE / 13 / 535 / SI2.675827 – PUSH & PULL – “Parking management and incentives as successful and proven strategies for energy-efficient urban transport”	



Table of contents

Introduction..... 3

- Problem description and general idea..... 3
- Paid parking and enforcement as basic framework conditions 4
- Structures and management 6
- Legal framework conditions 7
- Has the core-funding mechanism already been implemented in Cities so far? 8
- PUSH & PULL Cities: Proposals for Core Funding Mechanism in Each 8
- BACAU 8
- KRAKOW 9
- ÖREBRO 10
- LJUBLJANA 10
- TARRAGONA..... 11
- IASI..... 11
- NOTTINGHAM 11
- GENT 12

Introduction

This document first of all describes the Core Funding Mechanism that is at the core of Push and Pull, and then explains how each partner city is developing and putting this mechanism into practice.

Problem description and general idea

In European Cities urban mobility is characterised by two main problems:

- An overwhelming and steadily increasing use of cars in cities with all the negative impacts and
- A lack of (financial) resources to encourage use of sustainable modes of transport

So, in general it is a conflict in the use of public space but also on the use of (available) financial resources.

The PUSH&PULL project aims to improve urban mobility in European cities by means of parking space management combined with sustainable mobility/mobility management measures. By introducing paid parking, increasing parking fees, reducing or restraining parking supply or implementing comparable measures, car drivers will be pushed to use more sustainable transport. At the same time, the income generated from parking space management can and should be used for incentives to promote alternatives, thus pulling or attracting users towards public transport, walking, cycling and other sustainable modes.

To guarantee such a transfer of parking revenues towards sustainable mobility a so called core funding mechanism should be established in cities. This mechanism has the big advantage that a money should therefore be available on a consistent annual basis and that it is therefore not necessary to argue every year for a budget for sustainable mobility – this should instead be something automatic and institutionalised, like spending on roads (and which, once it is implemented once won't be taken back easily).

It is not absolutely necessary that the entire revenue is used to finance sustainable mobility. In many cases the cities need this money also to fill gaps in their overall budget. So an exclusive use of these revenues is mostly not acceptable by them and a compromise is perhaps the easiest way to establish such a core-funding mechanism. In Amsterdam, for example, the compromise that has been implemented sees a use of the revenues as follows:

- 39% of the revenues are used for financing sustainable mobility solutions for the 7 City districts
- 38% of the revenues are used for the management and the maintenance of the parking system and
- 23% of the revenues are shifted into a mobility fund for the inner city district that finances sustainable mobility solutions.

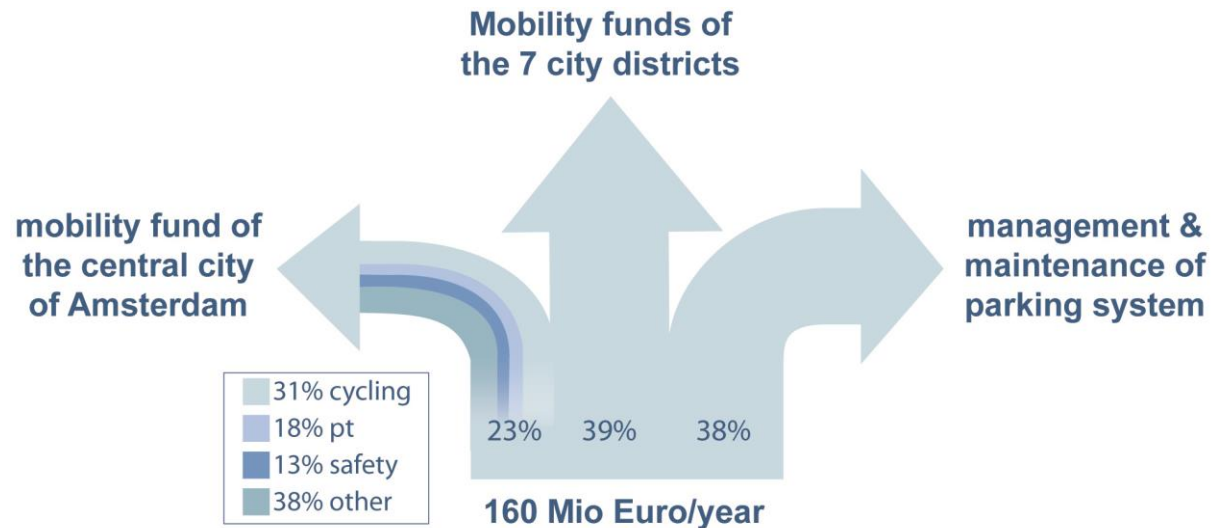


Figure 1: The Amsterdam Mobility Fund (Source: The Amsterdam Mobility Fund, TUB, 2014. Diagram FGM-AMOR, 2014)

But what are the basic framework conditions that need to be fulfilled so that the establishment of such a core-funding system could be taken into consideration (besides legal aspects, which differ from country to country)?

Paid parking and enforcement as basic framework conditions

The very basic one is the implementation of a system of paid parking and the enforcement of it. Usually paid parking is only introduced once problems with parking become really serious. Politicians and authorities often are afraid of parking management in general and in particular of paid parking options since when the topic is discussed in the public it arouses mainly negative reactions from citizens and journalists. Even more difficult is the implementation of enforcement. Although the regulation of parking space management at all and payment services are well understood by the citizens there often is an initial resistance against enforcement. The negative connotation of a rip-off strategy is detected when the enforcement appears on the agenda.

In the brochure "Parking Strategies to Support Livable Communities" from April 2012 the authors describe the evaluation of parking management (based upon the COST Action 342) in the following way:

Most communities will start without parking management strategies until free and abundant parking becomes congested and negatively impacts the area's ability to attract shoppers or other pedestrians. When this happens, local governments put parking regulations and controls in place, such as prohibiting parking in some locations and marking spaces more clearly. If parking availability continues to decline, governments introduce time restrictions on the free parking, attracting long-term parkers to spaces farther from the town center, where space turnover is encouraged. As parking congestion increases, some parkers may resort to the "two-hour shuffle" in which long-term parkers occupy high-demand spaces but move their cars every few hours to avoid citations.

Eventually, if parking demand outpaces supply, and construction costs for new parking remain prohibitive, cities turn to pricing to shift demand and influence mode choice. Parking pricing, in turn, can lead to residential "spillover," as neighborhoods close to high demand areas are targeted by long-term parkers looking to avoid paying for parking. Local governments solve this with residential parking schemes designed to give priority to residents who can purchase parking permits. Continued growth in car ownership and driving habits, combined with limited land in city centers has led to the use of Park & Ride lots, often with shuttles to move people between the lot and the town center. This can work for commuters and also for visitors and shoppers.

More recently, the concept of “Mobility Management” has found a place in cities trying to reduce congestion and promote a variety of travel modes. This tactic aims to enhance the accessibility of towns and cities for all people, regardless of their mode of transport. Providing connections between modes becomes very important when trying to create a “seamless journey,” where driving or taking a taxi is not necessary. Some large cities are also looking at “Performance – based Parking Pricing,” a strategy popularized by an urban planning professor from UCLA, Donald Shoup, and currently being tested in San Francisco and in London. This tactic takes a market-based approach, varying the price of parking based on supply and demand.

The Evolution of Parking Management



Figure 2: The Evolution of Parking Management (Source: *Parking Strategies to Support Livable Communities, 2012 based upon COST 342*).

There are a couple of smart and effective parking management strategies that should be taken into consideration when designing the elements of the core-funding mechanism. They could range from economic mechanisms, regulatory mechanisms, physical design mechanisms and mechanisms that belong to quality of service contracting and technologies. Which, or better which combination of these strategies a city decides to implement depends very much on the objectives of the city and the expected impacts. Does a City for example want to have a high turnover of parking spaces to support the local economy or does the city want to encourage people to shift to alternative modes of transport to the car or e.g. does the city want to protect residents and their parking demands etc.).

Especially the economic mechanisms need to be planned carefully. Some essential questions are:

- How high should the on-street parking fees be set so that parking search traffic is minimized and there is always parking available?

- How to harmonize the on-street parking fees with those from off-street (e.g. garages)? E.g. underpriced on street parking while at the same time high garage fees leads to extensive parking search traffic and therefore to congestions and exceeding emissions.
- How high should parking fines be set and how should enforcement be organized (especially regarding the costs for enforcement compared with the risk of people who try to park without paying)?
- Should parking fees be the same all over the city area or should they differ e.g. between areas with high demand and occupancy rate or differ regarding time of the day?
- Should parking fees be dynamic concerning the duration of parking (e.g. the longer, the more expensive)?

There are a lot of potential variations and combinations that need to be taken into consideration to develop an optimal system which is acceptable and fair, easy to handle, easy to be communicated, understandable and which earns money that then should be re-invested into sustainable transport measures.

Structures and management

Parking space management varies from city to city. Some cities have an separate department that is in charge of transport planning, another one for construction and another separate one that is in charge of parking management. So, competences are split between different departments, which make a joint strategy often quite difficult. Smaller cities have often only one department that is dealing with all transport issues.

What most of them have in common is that the money that is generated by the paid parking zone (parking tariffs and parking fines) feeds directly into the global budget of the city. For some cities this can be a significant part of the overall budget. Money that is dedicated for measures to pull or attract users towards public transport, walking, cycling and other sustainable modes is not available.

A very interesting example is the City of Gent (ca. 249.000 inhabitants). The City of Gent has combined the mobility department and the parking department under one joint department. This is a very clever step as the new department handles the topic not only from the side of regulating and managing parking but more strategically and integrated, in terms of how to manage traffic in a sustainable way using both approaches, parking and mobility management. This would lead to operational synergies. The department also decides on the question of spending the revenues.

Regarding acceptance COST 342 writes: *An important issue with regard to the acceptance of parking management belongs to the use of the money. People often seem to feel that the revenues raised are just another form of taxation imposed on the motorists. They are afraid that the money will vanish into the 'black hole' federal or municipal budget without any evident profit for the payers. Perhaps this is one of the reasons why restrictive schemes like access controls have a higher acceptance than pricing schemes. People want to know what their charges are used for and what the benefit is for them. The revenues should be allocated to the transportation sector (e.g. in order to improve public transport).*

This corresponds exactly with the approach of the Push&Pull project.

Obviously parking measures and regulations need to be enforced. Regarding **enforcement** there are also several variations for management and operation. Enforcement could be carried out by

- The police
- The authority itself with own staff
- Private entities which have a contract with the city administration.

There are pros and cons to each approach. One of the most important is the cost-benefit-ratio. The big advantage of private entities is that enforcement is their first (and often only) task while for the police or for authorities' staff enforcement is one out of several, and therefore of low priority. Hence recently it turned out that private bodies seem to be more effective than the police or authorities – see below.

One reason for low or even non-enforcement is the negative image that this task usually has. In France e.g. enforcement staff has additional functions which include to act as hosts who inform motorists about parking opportunities. It is conceivable that this host-function even could be extended towards mobility advice or further towards advice and information giving on the boroughs' functionality.

What should be enforced?

- Paid parking (do car users pay (enough)?)
- Parking time (do car users exceed their parking time?)
- Parking violation (pavements, no-parking zones, loading zones etc.)

How to enforce?

- Physical measures (pollards, wheel clamps etc.)
- Wardens / enforcement staff observing a certain area
- Automatic number plate recognition

Legal framework conditions

How about the use of revenues?

Do Cities have the possibility to use revenues that they get from parking space management and / or fines directly for encouraging people to sustainable mobility measures? Legally there is no standard regulation in Europe. While in some countries cities can decide on their own about the use of this money, in other countries there is a need for a legal change.

The authors of the COST 342 report suggests that *legislation also must make it possible that income from parking fees and –fines are made available to the local authority, being the authority in charge of enforcement. Also being the authority that carries the burden of urban car-mobility This legislation should also provide for the possibility to contract the actual work out to private parties. But this isn't the case in all European countries and sometimes an adoption of law is necessary* (quoted from COST 342 – Parking Policies and the Effects on Economy and Mobility, 2005).

Can a City decide on who is doing enforcement?

National legislation in many countries empowers the police to enforce parking regulations. However in e.g. Austria, Czech Republic, Finland, France, Norway, Portugal, Switzerland, Spain, UK and the Netherlands local authorities are empowered to enforce regulations relating to pay for parking. Where enforcement of paid parking is not the first priority of the police the use of other bodies has been demonstrated to be very effective in the UK. (quoted from COST 342 – Parking Policies and the Effects on Economy and Mobility, 2005).

In the UK parking is 'decriminalised' and in the Netherlands and Spain enforcement of paid parking can be brought under fiscal law and the enforcement of illegal parking can be dealt with under administrative legislation. This change of law seems to be a smart step towards more efficient operation of enforcement.

Possibilities to determine fees and penalties?

It is suggested that cities could determine own amounts of charges and fees on parking, in relation e.g. to public transport ticket rates. Unfortunately this isn't in all countries always the case. In Poland e.g. the maximum price charged for parking in cities is based upon a national law. Without a change of this national law a city has no possibility to increase parking fees and therefore to steer mobility behavior by this economical measure – even when at the same time public transport fees are increased.

Has the core-funding mechanism already been implemented in Cities so far?

There are a number of cities that already practice this core funding mechanism in a certain form.

	Amsterdam	Gent	Nottingham	Graz
A Core funding mechanism exist?	yes	yes	Yes	yes – although not fully legalised
For which type of parking?	On-street	On-street	Company site	On-street
Enforcement by Police / Authority / Private	Authority	Authority	Authority (via contractor)	Private
Can the City decide on fees for parking?	Yes	Yes	Yes	Yes
Does a Mobility Department exist?	No	yes	No – but transport including parking is the responsibility of a single department	No – different city departments deal with transport issues.
City-wide same regulation?	No, boroughs decide	City divided into different zones with different prices for residential permits and limited stay parking. Decision on these zones made by city mobility department, ratified by city council.	City divided into different zones with different prices for residential permits and limited stay parking. Decision on these zones made by city council.	Yes, there are two areas. Inner city (Blue Zones: limited parking duration, higher fees) and boroughs at the edge of city center (Green Zones: unlimited duration of parking and lower fees)

Table 1: Cities with core funding mechanisms similar to the approach of PUSH & PULL.

PUSH & PULL Cities: Proposals for Core Funding Mechanism in Each

This section reviews the proposals for a core funding mechanism in each PUSH & PULL city. The information is up to date as of September 2015.

BACAU

Revenue from residential parking permits and charged parking spaces will be used to further subsidise public transport and also to build new bike paths.

- **What has been done so far?**

The parking permit guide was elaborated and is out for public consultation;

Meetings upon this theme with local media and NGO's (there is a group of of NGO's who advertises the demand for a infrastructure regarding cycle traks and stands) have been held; Meetings have been held with city hall - technical staff, technical director, executive director, Mayor;

Identifying the parking lots from the central area that are suitable to be eliminated, charged/increased fees;

Increase the enforcement from the Local police for parking lots, old ones and the new created;

There are still discussion on the percentage that is to be allocated from this revenues for pull measures.

- **Problems faced?**

This mechanism should be functional starting next year after the new city budget will be approved by the Local Council.

The public transport is owned by a private company and cannot therefore be influenced too much on its actions by the city council.

The main arteries of the city are being rebuilt at this moment and this creates traffic problems and an objective attitude from citizens *regarding our measures*.

KRAKOW

- **What has been done so far?**

Mainly work on development of draft act of local law (still under discussion if it is in Mayor's powers or City Council). Draft of implementation plan – including necessary consultations with stakeholders.

- **What is the attitude of citizens?**

Interview surveys indicated that 68% of interviewed persons were v. positive (mark 4 or 5).

- **What formal processes are needed for implementation?**

The main decisions need to be taken by City's Budget Department and City Council.

- **Do you face any problems?**

Average income per year from „P” zone is. ca 20 mln PLN. Main expentidures are management of the zone and building of new parking spaces (especially Park & Ride). It is intended to start with 10% to be „transferred” for sustainable mobility modes development.

- **Is there a danger with implementation of the mechanism within the project?**

It is rather a problem with the agreed scale and formal issues. Generally the CFM will be implemented within the project lifetime.

ÖREBRO

- **What has been done so far?**
A simple implementation plan (working document) has been produced and has been spread at the involved municipal departments. It has also been discussed with ULSG and presented to involved politicians.
- **What is the attitude of citizens?**
Quite positive. Higher charges in general negative – but the idea to reinvest is viewed positively.
- **What formal processes are needed for implementation?**
Decisions in City Planning Committee and City Council (after internal referral)
- **Do you face any problems?**
Technical dept. would like to be compensated since they don't get enough money today to maintain the streets and cycle lanes to the level that the municipality would like to, and the CFM might reduce their income.
- **Is there a danger with implementation of the mechanism within the project?**
Maybe but (see above) the most important politicians like the idea.

LJUBLJANA

- **What has been done so far?**
Meetings and general approval from the deans.
CFM stated in draft Car Parking Policy (at least 50 % of revenues for SM measures).
 - Draft Car Parking Policy currently being processed by the deans.
 - Confirmation from the Management Committee foreseen for October/November 2015.
- **What is the attitude of your stakeholders?**
Deans agree with current plan.
Employees were not asked whether they agree or not but how should part of the revenues be spent:
 - mixed opinions on investment: 29% cycling, 23% PT, 19% walking, 19% parking; 9% other;
 - mixed response due to different level of communication:
- **FCIS (first Faculty)**
Electronic newsletter, small number attended 'live' presentation on a dedicated event, general support, a few demands, good debate
- **FCCT (second Faculty)**
Electronic newsletter presumably not sent, event with different topics regarding the new buildings, all employees attended, big revolt.
Formal processes;
 - Managing Committee of both faculties must accept and approve Car Parking Policy.
 - Financial issues have to be formalised.
- **What are the 'success stories' so far?**
General agreement / support from the deans.
- **Problems faced?**
Slow response time of the faculties.
Administrative issues (e.g. charging details, financial issues)

TARRAGONA

- **What has been done so far?**
AMT has explained to politicians and decision makers within the Municipality how important is that revenues from parking space management should be used to finance sustainable mobility measures.
- **What is the attitude of your stakeholders?**
They are interested and not reluctant to implement the CFM.
- **What is the attitude of citizens?**
We have no data about that.
- **What are the 'success stories' so far?**
It is possible to implement a kind of CFM in some areas or Departments of a Municipality. For instance, the revenues from AMT are used to fund the public transport operator and to pay some studies about sustainable mobility measures.
- **Do you face any problems?**
Spanish Municipalities have 3 different funding sources:
 1. Local taxes
 2. Budget transfer from the Spanish or Catalan Governments
 3. Property / capital transfers and public licenses

Then the overall budget is distributed by the Municipality to every Departments (Urbanism, Mobility, Tourism, etc.).
Unfortunately, there is no way to implement the CFM in Spanish Municipalities under the current legislation.

IASI

- **Concession contract process dropped** because of the large number of parking lots that were modernized with European Funds;
- **New department that will manage parking for the city of Iasi is to be created;**
- This decision was made after several **meetings and discussions** with the technical department of city hall and the current non-elected Mayor of Iasi (Vice-mayor that took over the ex-Mayors duties), director of technical department and the economical director of the European project department;
- **Official address** to the technical department of city hall that informs them about project activities and measures and asked them to include in their investment budget the 2 parking lots that we want to equip with parking meters;
- We also asked them to consider in the future the **implementation of a core funding mechanism for mobility measures in the city of Iasi;**
- **No time frame** for forming a new parking management department:
 - interviews results from Output.5.3 and 5.4 show that the **majority of respondents don't agree with the implementation of the core-funding mechanism** (69%Output 5.3, 64%-Output 5.4). This is a problem because the municipality will take into consideration **public opinion**.
- **Local elections coming next year**

NOTTINGHAM

- The core funding mechanism is a Workplace Parking Levy (WPL).
- This was fully implemented by April 2012.
- Controversial at the time of implementation – now broadly accepted.
- The business community were surveyed prior to implementation and were hostile – data so far suggests that they haven't acted on this however.

- The process of implementing a WPL is complex despite provisions in UK legislation. Requires an extensive consultation process.
- A number of employers have moved to Nottingham citing the level of PT provision as a contributing factor – none have moved away citing WPL as the primary reason.
- There are no problems at present – The WPL is operating as intended.
- The funding mechanism is well established and there is no danger to the mechanism in the life time of the P&P project.

GENT

As noted earlier, Gent is a leading city in terms of its core funding mechanism. Monies from parking charges and fines flow into a Mobility Company that remits a proportion of this money to the City, and then invests the rest in schemes, including for mobility management. This is shown in Figure 2, below.

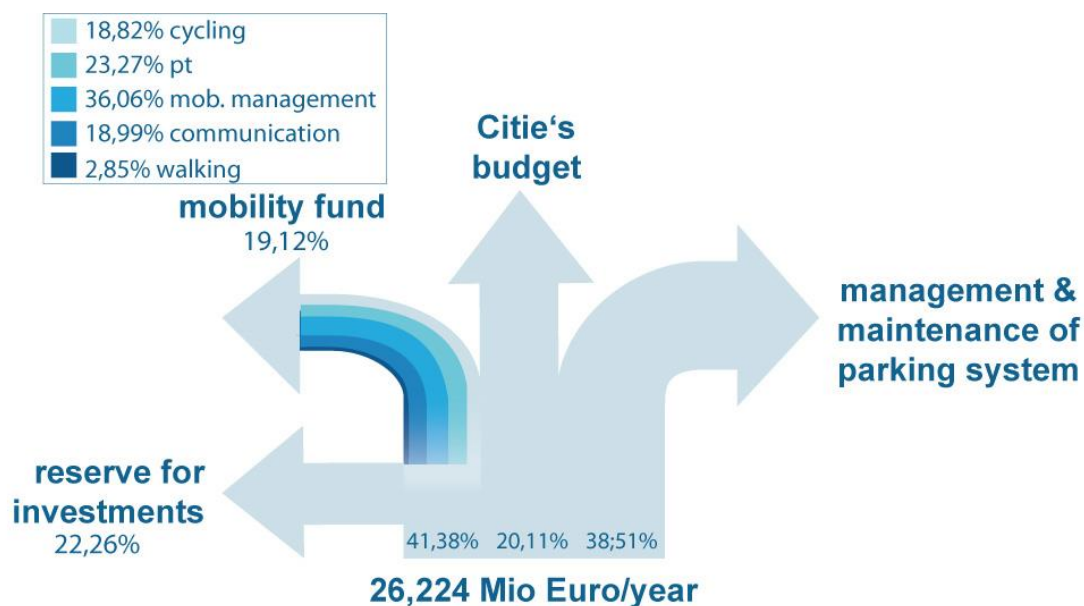


Figure 2 – spending of parking income by the City of Gent's Mobility Company

The table below provides a more detailed breakdown of these funds.

Proportions		
Total revenue parking	€ 26.224.988,33	100%
Exploitation costs parking	€ 10.098.628,05	38,51%
Flow to the fund of the City	€ 5.274.891,00	20,11%
Flow to the mobility fund*	€ 5.014.039,00	19,12%
Reserve for investments	€ 5.837.430,28	22,26%
*Distribution of mobility fund to		
Communication	€ 952.224,57	18,99%
Mobility management	€ 1.808.264,84	36,06%
Walking	€ 143.122,24	2,85%
Cycling	€ 943.760,35	18,82%
Public transport	€ 1.166.667,00	23,27%

The allocation of our funds from parking fees is not formally decided. There is no 'minimum percentage' that must be spent on sustainable mobility.

Every department within the Mobility Company makes an estimate twice a year of their required budget. This is negotiated within the Company and then approved by the city council. The percentages in the table above (these are from 2014) are simply based on budget requests from staff.