

Park & Ride

State of the Art in Europe



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1. Converting a car park into a Park and Ride facility

Poor public transport connectivity is one of the main reasons why commuters avoid using public means of transport to ride to work. This is the result of an international survey conducted by the human resources solutions provider Kelly Services in 2007. And: Only 40 percent of respondents use public means of transport to reach their place of employment.

The situation may improve by building P+R sites at strategic points and offering the required capacities. The concept is simple: Leave your car in a car park near a public transport stop and transfer to a bus or train to ride downtown. Park and Ride is as simple as that.

P+R diverts traffic from city centres

The advantages are clear. Fewer motorists enter the city centres in search of parking spaces. As a result, you have less air and noise pollution and better utilisation of public means of transport. Motorists are saved the trouble of having to look for a parking space. Visitors who are not familiar with the location can get themselves comfortably chauffeured to their destination, often even putting in less money and time as would be the case had they used their own car.

Experience in major German cities shows that P+R sites reduce private transport by about four percent. Example: In 2007, three percent of all passengers in the Munich public transport network used P+R. At first glance, this is not a high figure. But three percent correspond to 25 650 cars. Three percent fewer cars mean 25 650 times less exhaust emissions and noise.

Naturally, certain conditions must be met to make a P+R site efficient. P+R makes sense where public transport does not provide seamless access to the destination “city centre”, or where service intervals are very long or irregular. Therefore, before introducing or extending P+R facilities, the public transport services should be optimised, if required. Failure to do so could backfire, convincing users of public transport to rather use their own car when travelling into the city. Further, where sufficient and low-cost parking is available in a city centre, motorists will be even less motivated to switch to public transport.

Make P+R facilities an integral part of your transport concepts

Especially where larger sites are concerned, planners may find themselves in a dilemma. On the one hand, P+R facilities are most suitably located in close proximity to a city to appeal to a high number of potential users. On the other hand, the distance for motorists to reach a P+R site should be as short as possible. Where a P+R facility is located close to a city, the distance travelled by car to the site is usually longer than the remaining distance downtown to be covered by public transport. Commuters



who normally use only public transport might be incentivised to use parking facilities available in proximity to the city. The result would be higher traffic volumes and declining use of public transport especially in the greater area of a city. The above shows that new P+R sites should be part of the transport concepts for a city and its environs.

Generally, planners should analyse the target user group of a P+R site. In conurbations, people who commute into the city every day to work are the key target group. Examples in Germany show that commuters account for about 80 percent of the users. In addition, the sites should also appeal to tourists and shoppers or event-goers in order to optimise usage outside office hours.

Development and maintenance are expensive and should be cost-effective

Planners identify the required number of P+R parking spaces for a city by means of a so-called global prognosis. This involves identifying the number of people who commute into a city and its environs for work and who may perceive P+R as an alternative to the car. The result is increased by about ten percent to include other commuters as for instance shoppers. To be able to accurately assess the demand and derive the required parking space capacity, travel distances are investigated by questioning commuters and counting the users of public transport as well as recording the licence plates of the parked cars.

Developing and maintaining P+R sites is no cheap affair. Constructing one parking space in Germany costs about 5 000 Euros, and twice as much if it is a parking deck, not counting purchase of the property. P+R sites featuring more than 1 000 parking spaces involve considerable expenses with construction costs totalling no less than 25 000 Euros per parking space. Not forgetting operating costs which amount to 300 Euros per parking space and year, as computed by Munich-based Park & Ride GmbH. The Region Île-de-France transport network in France calculates 30 to 60 Euros per year for an open-air parking space, and ten times as much for a multi-storey car park or underground parking i.e. annually between 450 and 760 Euros per parking space.

2. Methodology: This is how we conducted the survey

Drive to the outskirts of a city, leave your car in a car park and transfer to underground or suburban trains to ride into the city centre. This is how Park and Ride works – a practical option for car drivers. Park and Ride schemes are designed to prevent congestion in the city centres and come with the added benefit of saving costs and time for motorists. But like everything else in Europe, the schemes vary considerably in the different countries as regards their name, signposting and pricing. Together with its 17 European partner clubs plus the clubs in Hungary and the Czech Republic, ADAC had a closer look at Park and Ride facilities in the framework of the EuroTest programme.

At first, only the capital cities of the partner clubs' countries were selected for the survey to the exception of the UK and Switzerland. In these two countries, Sheffield and Geneva were the cities of choice. The city of London did not feature in the survey, since P+R schemes exist in the Greater London area only and not close to the London city centre. In Switzerland, Geneva was selected instead of Bern because it is the location of international organisations and destination of many commuters from France. In Germany, three cities were included in the survey in addition to the capital Berlin. All in all, the survey reflects the situation in the following cities: Amsterdam/ Netherlands, Berlin, Hamburg, Cologne and Munich/ Germany, Brussels/ Belgium, Budapest/ Hungary, Geneva/ Switzerland, Helsinki/ Finland, Copenhagen/ Denmark, Lisbon/ Portugal, Ljubljana/ Slovenia, Luxembourg/ Luxembourg, Madrid/ Spain, Oslo/ Norway, Paris/ France, Prague/ Czech Republic, Rome/ Italy, Sheffield/ Great Britain, Stockholm/ Sweden, Vienna/ Austria and Zagreb/ Croatia. The majority of those cities offer a total of about 80 000 Park and Ride parking spaces near the city centres at transit points to ride downtown.

The survey covered two areas: availability, size and characteristics of P+R systems and local transport connectivity. The focus was placed on the capacities of Ride facilities, the nation-wide designation, signposting and pricing for integrated public transport. Also, P+R extension plans and facility requirements played a role as well.

ADAC commissioned the IMK Institute for Applied Marketing and Communication Research with conducting and evaluating the survey. Data was collected in writing from the relevant city officials and representatives of local public transport. A database was generated containing all details from the questionnaires. The data set was subsequently adjusted for the cities where the respondents stated that no P+R system was available or gave conflicting information. This was the case for Brussels, Copenhagen, Lisbon, Madrid and Zagreb.



The survey was complemented by additional investigation in close cooperation with the partner clubs as well as Internet research. The quality of local Park and Ride sites was not part of the study.



3. Park-and-Ride jungle in Europe: Seek and you shall find

Different signs, different designs, some free, some cheap, some expensive – this is Park and Ride in Europe. As multi-coloured as life in the individual countries is the array of Park and Ride sites in European cities. These are the findings of a study conducted by ADAC and 19 automobile clubs in 22 major European cities. For the survey, experts of the city administrations and representatives of local public transport were interviewed.

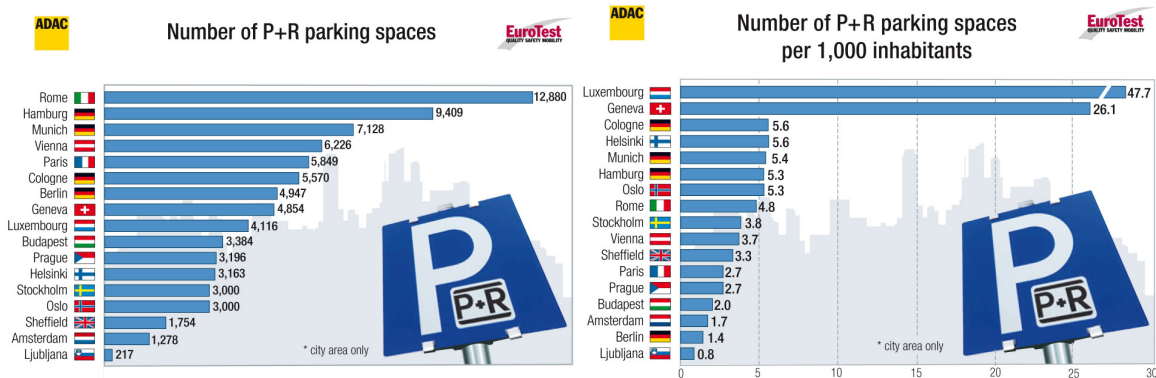
Nil return from Copenhagen, Brussels, Madrid, Lisbon and Zagreb: either they have no P+R system or answers were inconsistent. Brussels city and region, for instance, lack the political commitment to install this type of parking system, whereas in Madrid and Lisbon there is no common understanding as to the design of Park and Ride facilities.

The other cities handle P+R schemes quite variably, for instance where the distance between parking lots and public transit points is concerned. More than half of the surveyed cities have defined maximum requirements for the distance between the site and the public transport stop. This is about 300 metres on average in Europe. In Cologne the distance is shortest with between 100 and 200 metres, while in Berlin P+R customers are expected to walk up to 800 metres. Between 35 and 45 percent of the cities provide definitions for ground structure or lighting requirements respectively for P+R sites as part of their safety policy.

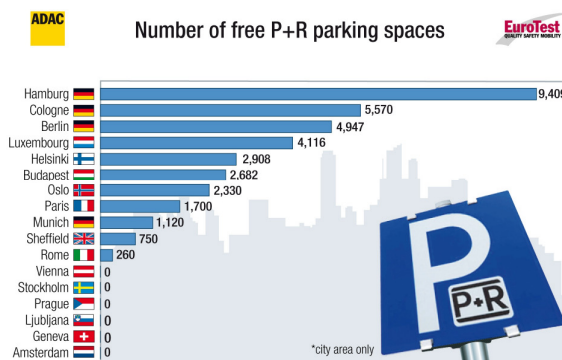
Nearly all cities intend to broaden their offer

Considerable variation was found in the capacity of P+R sites. While Ljubljana currently only operates one site offering 217 parking spaces, motorists in Rome can select one of about 13 000 parking spaces at 31 sites. Paris plus region ranks first in Europe with Île-de-France offering a total of 547 sites with over 100 000 parking spaces. Bringing the available number of parking spaces in relation to the number of inhabitants in a city, Luxembourg leads the field with nearly 50 parking spaces per 1 000 inhabitants, followed by Geneva with 26 parking spaces. All other cities range at a much lower level providing between one and six parking spaces per 1 000 inhabitants. However, no less than 80 percent of the surveyed cities mean to extend their parking space capacity, with more than 70 percent planning to construct new sites.



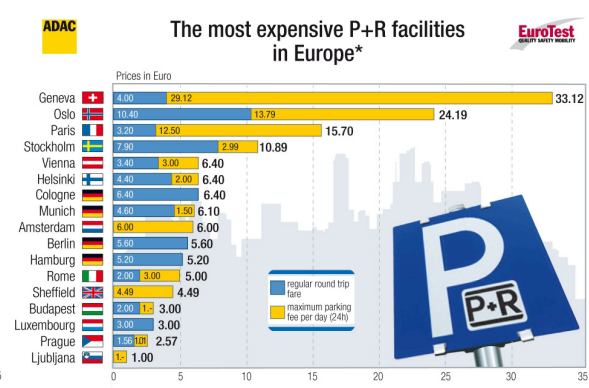
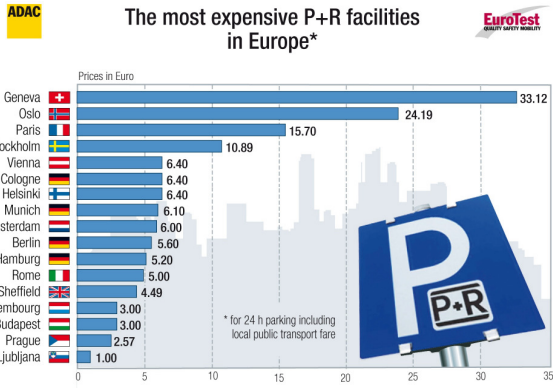


Variation does, however, not only affect capacity. There also are striking differences with regard to the pricing policy. While P+R sites in Luxembourg and in Berlin, Hamburg and Cologne are generally free of charge, P+R parking in Geneva, Prague, Stockholm and Vienna is subject to payment. In addition to this all-or-none policy, there are a number of cities adopting a mixed approach: Helsinki, Budapest and Oslo offer more than 75 percent of their parking free of charge, while the relation in Munich and Rome is exactly the reverse with motorists being required to pay at over 80 percent of the P+R sites.



Expensive Five Star car park in Geneva

Geneva has the highest P+R charges in Europe. In the most expensive facility, the Parc Relais Étoile, twelve hours parking come at a cost equivalent to about €30, plus €2 per person for the ride into the city centre. Season tickets are rather low-priced making the facility attractive for commuters, which is yet no option for travellers just visiting for the day. Also the average price per day of €14.70 specified by Geneva officials is quite impressive, while all other cities charge €4.80 on average at their most expensive sites. The exception Ljubljana where you pay €1 a day for parking including return bus ticket for the trip into the city centre.



The study revealed a relation between the pricing policy and type of operator. While privately operated sites are generally charged, public facilities provide either free or low-cost parking. Often, though not always, parking gets more expensive the closer the facility is located to the city centre. This is not the case in Prague and Amsterdam where parking fees are identical all over the city.

“Liityntäpysäköini” in Finland is “parcheggio di scambio” in Italy

Signposting policies were found rather inconsistent. 35 percent of the surveyed cities indicate that they install P+R signs on the main arterial roads at best, and 20 percent in the immediate vicinity of a P+R site only. The cities having an obvious aversion to signposting include Rome which is offering the highest number of P+R parking spaces (13 000) in the city area.

Looking at the national names for P+R sites in Europe is interesting as well. Just ask for “Liityntäpysäköini”, if you need directions to the nearest P+R site in Finland. Motorists travelling in Sweden and Norway will face less difficulties since P+R is universally called “Infartsparkering” or “Innfartsparkering”. In France and Switzerland, you have to look for “Parc Relais”, “Parking Relais” or “Parking d’échange”, while in southern Italy you should watch out for “parcheggio di scambio” signs. In the Netherlands, the established name for P+R is “Transferium”. All other survey cities, i.e. more than 50 percent, use “Park and Ride” or the shorter “P+R” on most signs. This at least is where European harmonisation is evident.



4. Demands: Define clear minimum standards in Europe

Sites and parking spaces:

- ◆ Construct more P+R sites boosting capacity
- ◆ Define European minimum criteria as opposed to „normal“ car parks: At least 40 parking spaces, maximum 300 metres to public transport stop, firm ground both for parking spaces and footpath, sufficient lighting and uniform signposting
- ◆ Harmonise naming and signposting to ensure recognition by non-natives. Identify the type of local public transport connection e.g. by means of bus or train symbol
- ◆ Adopt suitable measures to ensure safety and cleanliness
- ◆ Define opening hours and maximum parking duration to deter abusive parking
- ◆ Ensure regular quality up-dates for available sites
- ◆ Provide clear signposting for P+R sites on arterial roads

Public transport connectivity:

- ◆ Increase local public transport frequency
- ◆ Ensure visible display of local public transport network and tariff plans as well as car park pricing and usage regulations in the national language plus English

Charging regime:

- ◆ Provide low cost or free Park and Ride facilities to the users of local public transport only, however cheaper than normal parking spaces
- ◆ Keep prices stable and define a pricing policy on the basis of “pay more the nearer you are to the city” to encourage travellers to switch public transport as far away from the city centre as possible
- ◆ Offer reduced integrated tickets for parking and public transport round trip

Administration and information:

- ◆ Clearly define coordination strategies and competences for P+R operators, city administrations and local public transport operators and ensure controlled management
- ◆ Offer more information about Park and Ride facilities in your city
- ◆ Advertise existing Park + Ride sites on the cities’ and public transport operators’ websites in the national language plus English



5. Factcheet: P&R per city

Germany: Berlin

Inhabitants:	3 422 943
P+R sites:	44
P+R parking spaces:	4 947
Of which free of charge:	all
Name:	P+R
Signposting:	on arterial roads and near the facilities
Opening hours:	not specified
Parking fees:	none
Public transport fares:	€4.20 to €5.60 round trip 1 adult
Website:	www.stadtentwicklung.berlin.de/verkehr/verkehr_in_zahlen/de/entwicklung/parken.shtml (German only)

Our tip:

- ◇ The above figures relate to the city area. Greater Berlin provides 99 sites with 9 350 parking spaces free of charge.

Germany: Hamburg

Inhabitants:	1 773 218
P+R sites:	49
P+R parking spaces:	9 409
Of which free of charge:	all
Name:	P+R
Signposting:	on motorways, on arterial roads and near the facilities
Opening hours:	not specified
Parking fees:	none
Public transport fares:	€3.30 to €5.20 round trip 1 adult
Website:	www.hvv.de/wissenswertes/autofahrer/park-ride/ (German only)

Our tip:

- ◇ The above figures relate to the city area. In the area of the Hamburg public transport network, 120 sites with over 18 000 parking spaces are available free of charge.

Germany: Cologne

Inhabitants:	995 397
P+R sites:	28
P+R parking spaces:	5 570
Of which free of charge:	all
Name:	P+R
Signposting:	on motorways, on arterial roads and near the facilities
Opening hours:	not specified
Parking fees:	none
Public transport fares:	€4.60 to €6.40 round trip 1 adult
Website:	www.kvb-koeln.de/german/fahrplan/parkandride.html#köln (German only)

Our tip:

- ◇ The above figures relate to the city area. In the area of the Rhein-Sieg public transport network 149 sites with over 19 000 parking spaces are available.

Germany: Munich

Inhabitants:	1 314 350
P+R sites:	24
P+R parking spaces:	7 128
Of which free of charge:	1 120
Name:	P+R
Signposting:	on motorways, on arterial roads and near the facilities
Opening hours:	24h
Parking fees:	maximum €1.50 per day flat
Public transport fares:	€4.60 round trip 1 adult
Website:	www.parkandride.de ; www.mvv-muenchen.de (German only)

Our tip:

- ◇ The above figures relate to the city area. In the Munich area 100 P+R sites with about 18 000 parking spaces are available free of charge.

Finland: Helsinki

Inhabitants:	568 146
P+R sites:	27
P+R parking spaces:	3 163
Of which free of charge:	2 908
Name:	Liityntäpysäköinti
Signposting:	some on motorways, on arterial roads and near the facilities
Opening hours:	different for each site
Parking fees:	maximum €2 per day flat
Public transport fares:	€4.40 round trip 1 adult
Website:	www.ytv.fi/FIN/liikenne/kartat/liityntapysakointi/etusivu.htm (Finnish and Swedish)

France: Paris

Inhabitants:	2 166 200
P+R sites:	28
P+R parking spaces:	5 849
Of which free of charge:	1 700
Name:	P+R, Parc Relais, some sites are still called Parc d'Intérêt Régional (P.I.R.)
Signposting:	some on motorways, on arterial roads and near the facilities
Opening hours:	different for each site
Parking fees:	maximum €12.50 per day
Public transport fares:	€3.20 round trip 1 adult
Website:	http://www.stif-idf.fr/pour-voyager-ile-de-france/les-parcs-relais-votre-gare-dot-/site-parcs-relais/choisir-son-parc-relais-1506.html (French only)

Our tip:

- ◇ The above figures relate to the city area. In the Île-de-France (Paris region) area 547 sites with over 105 000 parking spaces are available, of which more than 54 000 are free of charge.

UK: Sheffield

Inhabitants:	530 300
P+R sites:	8
P+R parking spaces:	1 754
Of which free of charge:	750
Name:	P+R
Signposting:	on arterial roads and immediate vicinity of the sites
Opening hours:	not specified
Parking fees:	maximum €4.50 per day
Public transport fares:	included in parking fee for the driver
Website:	www.travelsouthyorkshire.com/travel_information/travelling_by_car/park_and_ride/ (English only)

Italy: Rom

Inhabitants:	2 708 395
P+R sites:	31
P+R parking spaces:	12 880
Of which free of charge:	260
Name:	Parcheggio di scambio
Signposting:	immediate vicinity of the sites
Opening hours:	not specified
Parking fees:	maximum €3 per day
Public transport fares:	2 € round trip 1 adult
Website:	www.atac.roma.it/ (Italian only)

Luxembourg: Luxembourg

Inhabitants:	86 329
P+R sites:	5
P+R parking spaces:	4 116
Of which free of charge:	all
Name:	P+R
Signposting:	on motorways, on arterial roads and near the facilities
Opening hours:	not specified
Parking fees:	none
Public transport fares:	€3 round trip 1 adult
Website:	none

Netherlands: Amsterdam

Inhabitants:	743 104
P+R sites:	5
P+R parking spaces:	1 278
Of which free of charge:	none
Name:	P+R, Transferium
Signposting:	on motorway exits of the A 10 motorway
Opening hours:	between 7.00 and 2200 hours in Bos en Lommer, 24h at the remaining four sites
Parking fees:	€6 per day flat
Public transport fares:	round trip for up to 5 persons included in parking fee
Website:	www.bereikbaaramsterdam.nl/live/main.asp?subsite_id=23 (Dutch only)

Our tip:

- ◇ Upon delivery of the parking coupon, the service staff will supply free public transport tickets.
- ◇ Deliver stamped public transport ticket to service staff and pay reduced parking fee.
- ◇ Please notice: If the public transport ticket is unstamped or was incorrectly stamped, regular parking fees of between €15 and €21 per day will apply.
- ◇ Passenger car parking up to four days maximum at special rate.

Norway: Oslo

Inhabitants:	565 653
P+R sites:	5
P+R parking spaces:	3 000
Of which free of charge:	2 330
Name:	Innfartsparkering
Signposting:	some on motorways, on arterial roads and near the facilities, some not signposted
Opening hours:	not specified
Parking fees:	maximum €14 per day
Public transport fares:	€5.20 to €10.40 round trip 1 adult
Website:	www.trafikketaten.oslo.kommune.no/parkering/innfartsparkering/ (Norwegian only)

Our tip:

- ◇ Free sites are much closer to the city centre than the sites which are subject to payment.

Austria: Vienna

Inhabitants:	1 681 469
P+R sites:	6
P+R parking spaces:	6 226
Of which free of charge:	none
Name:	P+R
Signposting:	on motorways, on arterial roads and near the facilities
Opening hours:	24h
Parking fees:	€3 per day flat
Public transport fares:	€3.40 round trip 1 adult
Website:	www.vor.at (German only)

Sweden: Stockholm

Inhabitants:	795 163
P+R sites:	22
P+R parking spaces:	3 000
Of which free of charge:	none
Name:	Infartsparkering
Signposting:	on arterial roads and immediate vicinity of the sites
Opening hours:	not specified
Parking fees:	maximum €3 per day flat
Public transport fares:	€6 to €12 round trip 1 adult
Website:	www.stockholmparkering.se/infartspark.htm (Swedish only)

Switzerland: Geneva

Inhabitants:	1 314 350
P+R sites:	19
P+R parking spaces:	4 854
Of which free of charge:	none
Name:	P+R, Parking relais, Parking d'échange
Signposting:	on motorways, on arterial roads and near the facilities
Opening hours:	24h
Parking fees:	€maximum 29.10 per day
Public transport fares:	€4 to €7.60 round trip 1 adult
Website:	www.ge.ch/parkings/welcome.html (French only)

Our tip:

- ◇ Seven of overall 19 P+R sites are only available to season ticket holders

Slovenia: Ljubljana

Inhabitants:	278 638
P+R sites:	1
P+R parking spaces:	217
Of which free of charge:	none
Name:	P+R
Signposting:	near the facilities
Opening hours:	between 6.00 and 20.00 hours
Parking fees:	€1 per day flat
Public transport fares:	round trip included for the driver
Website:	www.jh-lj.si/ (Slovenian only)

Our tip:

- ◇ After payment of the parking fee, two plastic tokens for the bus ride into the city centre are provided

Czech Republic: Prague

Inhabitants:	1 194 407
P+R sites:	17
P+R parking spaces:	3 196
Of which free of charge:	none
Name:	P+R
Signposting:	some on motorways, on arterial roads and near the facilities
Opening hours:	between 04.00 and 01.00 hours
Parking fees:	€1 per day flat
Public transport fares:	€1.50 round trip for the driver
Website:	www.dpp.cz/ (in Czech, German and English)

Our tip:

- ◇ Public transport ticket comes reduced for the driver only. All other car passengers are required to purchase a regular ticket.

Hungary: Budapest

Inhabitants:	1 696 128
P+R sites:	25
P+R parking spaces:	3 384
Of which free of charge:	2 682
Name:	P+R
Signposting:	immediate vicinity of the sites
Opening hours:	not specified
Parking fees:	€1 per day flat
Public transport fares:	€2 round trip 1 adult
Website:	www.parking.hu/ (in Hungarian, German, English, Czech and Russian)

