

USEmobility newsletter

“Understanding Social behaviour for Eco-friendly multimodal mobility”

3rd issue – 2013 April



Policy brief in English
Core findings in a nutshell

Policy brief in German

Strategic recommendations

for Decision Makers in Politics

for Providers of Transportation Services

for Civil Society Organisations

for the European Commission

The EU project USEmobility applies a new approach to the analysis of European mobility behaviour. It particularly aims to find out why people decided to switch from exclusive car use to public transport within the past 5 years.



USEmobility is conducted by a consortium of seven partners from five European countries. More information is on our

website: www.usemobility.eu

The project is funded by the European Union's Seventh Framework Programme

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Members of the USEmobility consortium at the final conference

Considerable dynamism in modal choice

On the question of what actually motivates people to use eco-friendly modes of transport, particularly public transport and multimodal transport chains more intensively, the USEmobility project has come up with a range of interesting insights.

People in Europe are surprisingly flexible when it comes to choosing their mode of transport. Almost half of all people belong to the group of so-called 'swing users', who switched in the last five years from the car to public transport or vice versa. Changes in people's personal situation (relocation, a new job, birth of children, retirement) influence strongly their choice of means of transport. People are also more multimodal and more pragmatic than expected. When it comes to the characteristics of services offered, classical 'hard' factors have the highest relevance in both the decision to use public transport more often and, on the contrary, to quit public transport. But the influence of 'soft factors' is also considerable; therefore they should be taken seriously.

Under the lead management of the German Pro-Rail Alliance, USEmobility demonstrated that putting the focus on travellers and their needs can lead to an increase in environmentally-friendly mobility and that a turnaround in transport behaviour can be achieved in Europe. This will require a concerted effort by all stakeholders. This process has to begin today to ensure that targets on sustainability are met and to give people a greater quality of life. Please make use of USEmobility's insights and recommendations!

For more details please visit: www.usemobility.eu

Why do travellers change transport mode: implications for policy and providers

Video from the final conference



Just click on the picture above, and enjoy viewing!

EU project USEmobility:
"Why do you travel by train?"



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**Understanding Social behaviour for
Eco-friendly multimodal mobility - that is the
full title of the EU project USEmobility.**

Surveys in ten selected regions in five European countries aimed to provide an answer. The project used a novel approach: Europeans were not asked what they think needs to happen in order to encourage them to use public transport in future instead of their cars - in other words no unrealistic wish lists and well-meant statements of intent.

Instead, people who had already switched to using

buses and trains were asked why they decided to switch - to find out exactly why they changed their transport behavioural patterns.

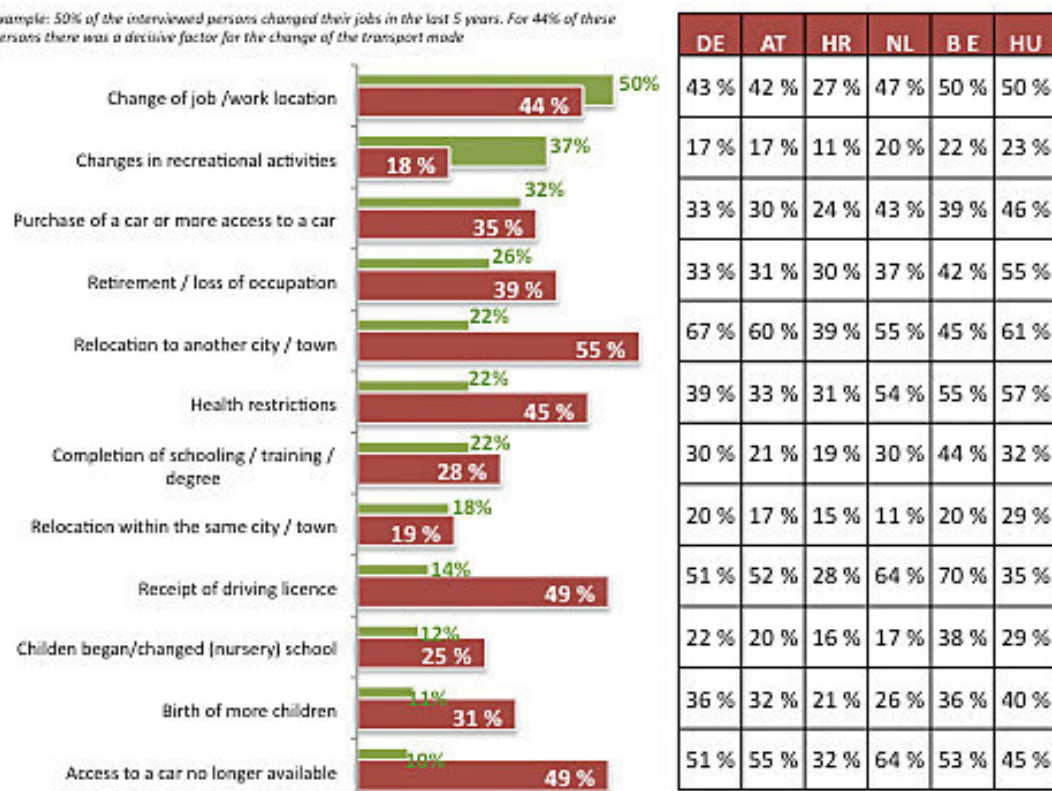
[The survey-results of the EU project USEmobility](#)

The results of the EU project USEmobility: People in Europe are surprisingly flexible when it comes to choosing their mode of transport. Within the last five years, around half of all travellers in Europe have made changes to their own transport habits and have tried out a new mobility mix.

Transport researchers found out that people review their established choice of transport mode in every new phase of their life circumstances, from how to get to school to starting an apprenticeship, from changing job to retiring. And: half of all those surveyed have actually made such a change within the last five years.

Change of the individual life situation of the interviewed swing users (■) and decisive factors for the change of transport mode (■)

Example: 50% of the interviewed persons changed their jobs in the last 5 years. For 44% of these persons there was a decisive factor for the change of the transport mode



Source: Survey on „swing users“ within the EU project USEmobility in Germany, Austria, Croatia, the Netherlands, Belgium and Hungary

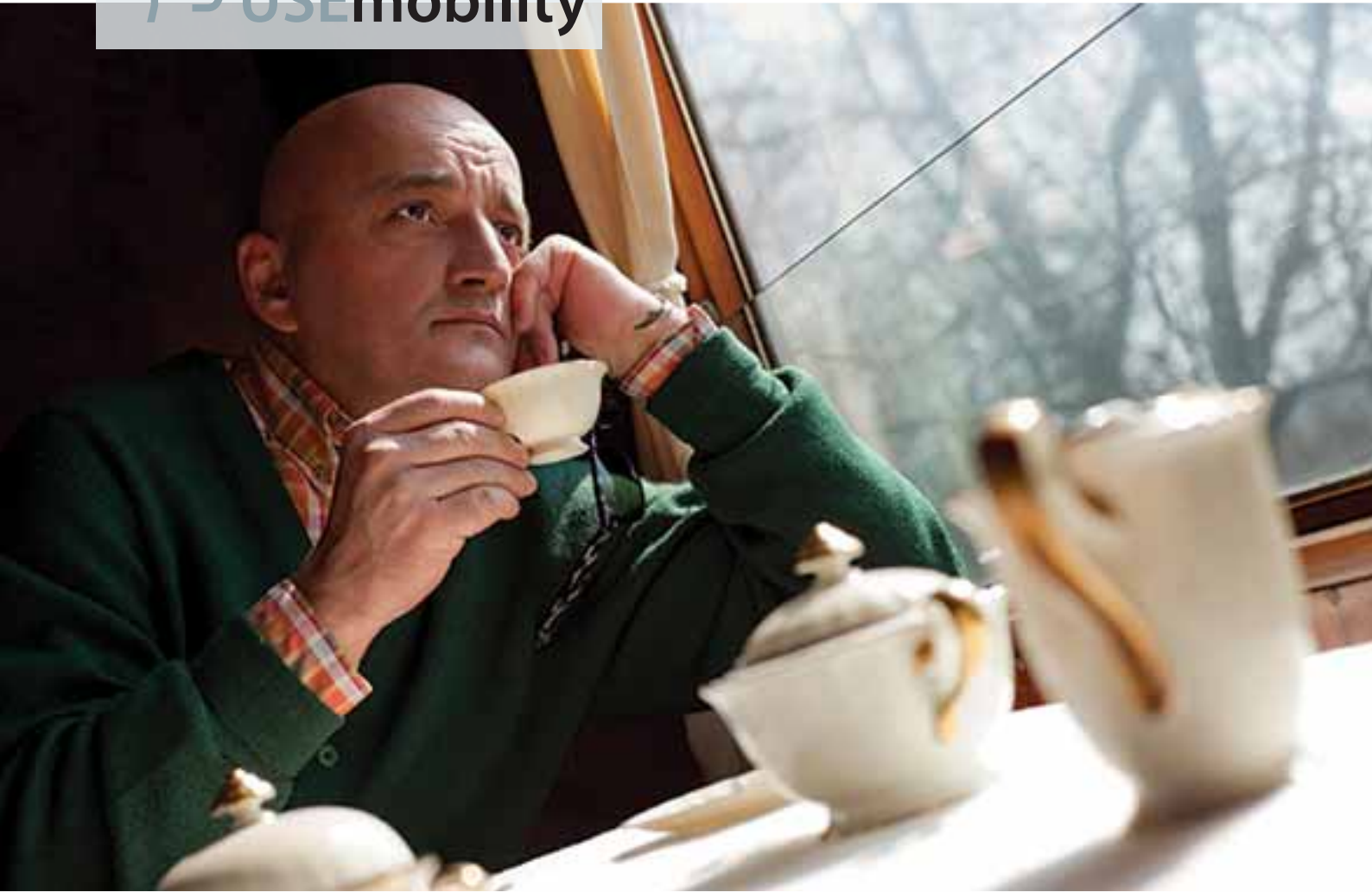
On the basis of the project's findings, the project consortium has suggested a series of measures that will promote change towards multi-modal transport usage patterns in the medium to long-term. USEmobility has developed scenarios for the future and discussed them intensively with policy makers and transport companies.

All the facts and strategic recommendations can be found in the [policy brief](#).

Project partners

- The lead project manager for the EU project USEmobility was the German Pro-Rail Alliance.
- The Hamburg-based market research institute [Quotas](#) carried out the survey on behavioural change.
- [BSL Transportation Consultants](#), also based in Hamburg, worked on the current state of mobility research and the national trends in travellers' choice of transport mode.
- The [European Passengers' Federation](#) from Belgium developed the concepts for the workshops, bringing together the three target groups (policy makers, companies and organisations) to discuss visions for the future of European transport in the years 2020 and 2050.
- The [Clean Air Action Group](#) from Hungary was responsible for project communications and the Web site.
- The [Austrian Transport Club VCÖ\(VCÖ\)](#) - Mobility with a Future, based in Vienna, and the Croatian [Savez za Željeznicu](#) (Pro Rail Alliance) took on the role of disseminating the project's findings within their own countries.

[European Commission project description](#)



Why do travellers in Europe
change transport mode?

Facts and implications
for policy and providers

Results of the EU-funded project USEmobility:
'**U**nderstanding **S**ocial behaviour for **E**co-friendly
multimodal **m**obility'

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Project Coordinator

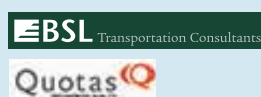
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The project is funded by the European Union’s Seventh Framework Programme



Consortium USEmobility is conducted by a consortium of 7 partners from 5 European countries



Why do travellers in Europe change transport mode?

Facts and implications for policy and providers

Mobility begins in the mind – and there is a great deal of movement going on there. The EU-funded project ‘Understanding Social behaviour for Eco-friendly multimodal mobility (USEmobility) analysed the individual reasons that lie behind selecting a mode of transport. USEmobility surveyed citizens in six European countries (Austria, Belgium, Croatia, Germany, Hungary, and Netherlands) who have modified their mobility mix in the last five years.

The project’s results contribute to better understanding the reasons for changes in the modal choice. The insights gained will help **decision makers in politics**, as well as in **transportation companies**, to develop a transport system that motivates more people to opt for public transport and multimodal combinations. At the same time, better understanding the reasons for change provides valuable support for **civil society organisations** willing to take action in the field of sustainable transport.

USEmobility focused on regional and local mobility because short- and medium-distance travel is the biggest part of people’s daily mobility. On the question of what actually motivates people to use eco-friendly modes of transport, particularly public transport and multimodal transport chains, more intensively, the USEmobility project has come up with a range of interesting new insights.



In 2011, the USEmobility survey contacted a representative sample of 12,900 citizens on a national level in six European countries (Austria, Belgium, Croatia, Germany, Hungary, and Netherlands). Those participants who had modified their mobility mix in the previous five years were surveyed about their motives (over 6,000 ‘swing users’). Additionally, a further 4,075 ‘swing users’ were interviewed on a regional level in 10 best-practice regions in the six surveyed countries.

Altogether, the USEmobility survey questioned over 10,000 ‘swing users’ about the reasons behind their modal choices.

The USEmobility insights are very similar in all project countries, suggesting that they are also applicable to other European countries that did not participate in the project.

USEmobility insights – opportunities for change



Dynamism in modal choice – many ‘swing users’

In choosing their mode of transport, users behave far more dynamically than one would expect when examining today’s modal split, which appears to be rather static. Almost half of the people contacted during the USEmobility survey said that they had modified their mobility mix in the last five years. This means that already today, half of all people belong to the group of so-called ‘**swing users**’, who switched from the car to public transport or vice versa. The expression ‘swing users’ includes both, people who have completely changed to another mode of transport, as well as travellers who have altered the weighting within their mix of multiple transport modes (‘mobility-mix’). This result shows that there is a lot of dynamism in people’s choice of transport mode. For practical purposes this insight is of great importance: Where there is a great deal of movement, there is also the opportunity for policy makers and transportation companies to motivate travellers to decide in favour of public transport.

Openness to multimodality

Multimodal combinations are a sensible solution where there is no direct access to public transport services. For bridging the ‘last mile’ (or ‘first mile’ respectively) users can combine line-bound public transport services with other modes of transport, like bike, e-bike, hailed shared taxis or private car. Thirty percent of swing users are aware of the advantages of combining multiple modes of transport for a journey and use multimodal chains. A further forty percent of swing users decide as the situation arises which mode of transport suits their purpose. Choosing one’s transport mode increasingly becomes a dynamic case of opting for ‘both – one as well as the other’, and not so much a case of ‘either/or’. For the majority of swing users, **multimodal travel** is already a reality. Overall, the change to public transport is by no means always due to a person’s not owning a car.

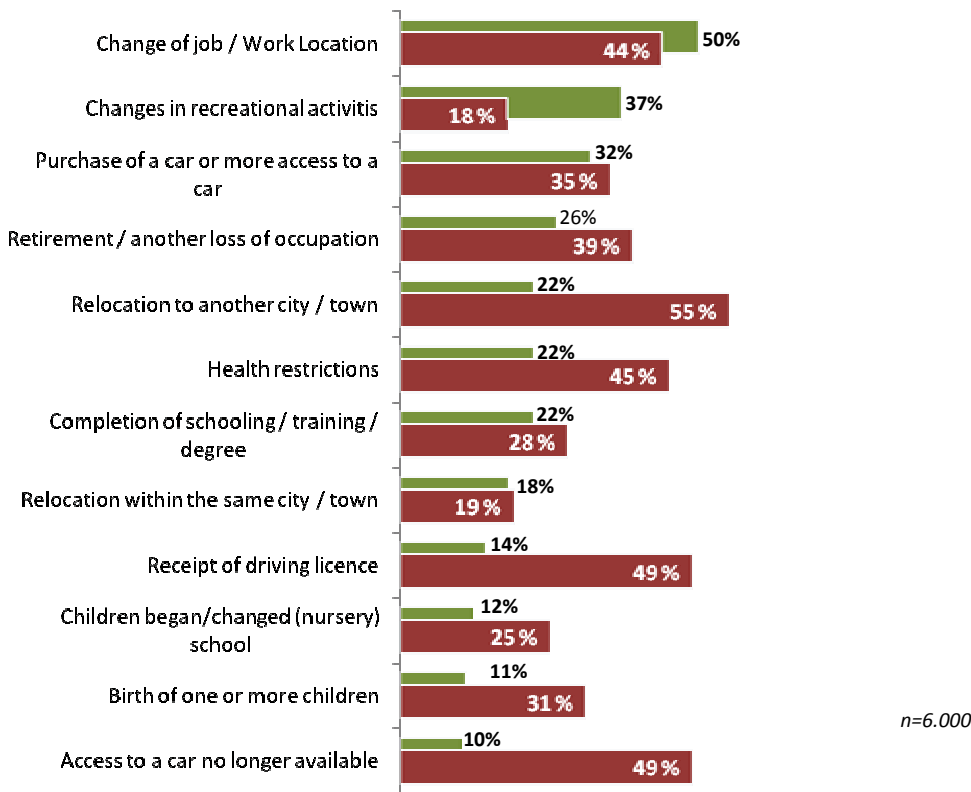
Changes in personal situation trigger shifts in the mobility-mix

A new and surprising insight of the USEmobility project is how strongly **changes in people’s personal situation** influence changes in their choice of means of transport. Over half of the survey participants stated that change in their personal situation (relocation, a new job, birth of children etc.) was



Occurrence and importance of factors related to the personal life situation

Occurrence of changes in personal situation (■)
Decisive influence (■)



a central motive for the process of reorientation. Such changes in life circumstances relevant to the choice of transport mode do happen frequently. Greater consideration and individual attention shown towards people in a situation of change will, therefore, offer transport policy-makers as well as providers of transportation services, a good opportunity to attract new customers to public transport or multimodal combinations, especially where there are already well developed public transport services on offer.

More pragmatism than expected

For users, the decision to change is based on their own personal background and attitudes. Looking at swing users’ attitudes towards mobility, it is interesting to see that in all USEmobility countries mobility pragmatists comprise a considerable segment within the swing users. On average more than a quarter of swing users take a pragmatic point of view when choosing their mode of transport. It is interesting to see that in all USEmobility countries

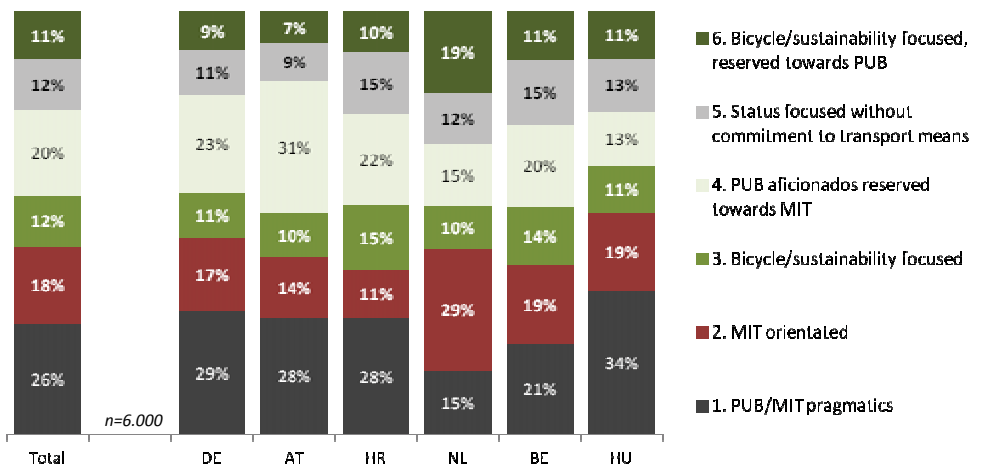
“The focus of USEmobility is much broader than many known studies, since it worked out the importance of the reasons for change. People changing their life situation are ready to think about their mobility patterns and alternatives.” Christoph Djazirian, Head Strategy Passenger Transport DB AG (German Railways).





(except the Netherlands) pragmatic swing users cover a considerably bigger segment than the group of clearly car oriented swing users. Further important segments cover the advocates of public transport, and swing users who attach importance to sustainability. Where there is great openness to public transport and multimodality there is also the opportunity for policy makers and companies to influence people’s choice in favour of public transport.

Attitude-based segmentation of swing users



(PUB = public transport; MIT = motorised individual transport)

It is clear that besides users’ attitudes, life situations and socioeconomic background (so-called user-related factors), further aspects are relevant to modal choices. In fact, the decision in favour of or against a certain means of transport is complex. Swing users usually indicate a mix of several factors in combination as relevant for their behavioural change. Of decisive influence in this respect are offer-related factors (the characteristics of the available transport alternatives), as well as the impact of transport policy on people’s modal choices (so-called policy related factors).

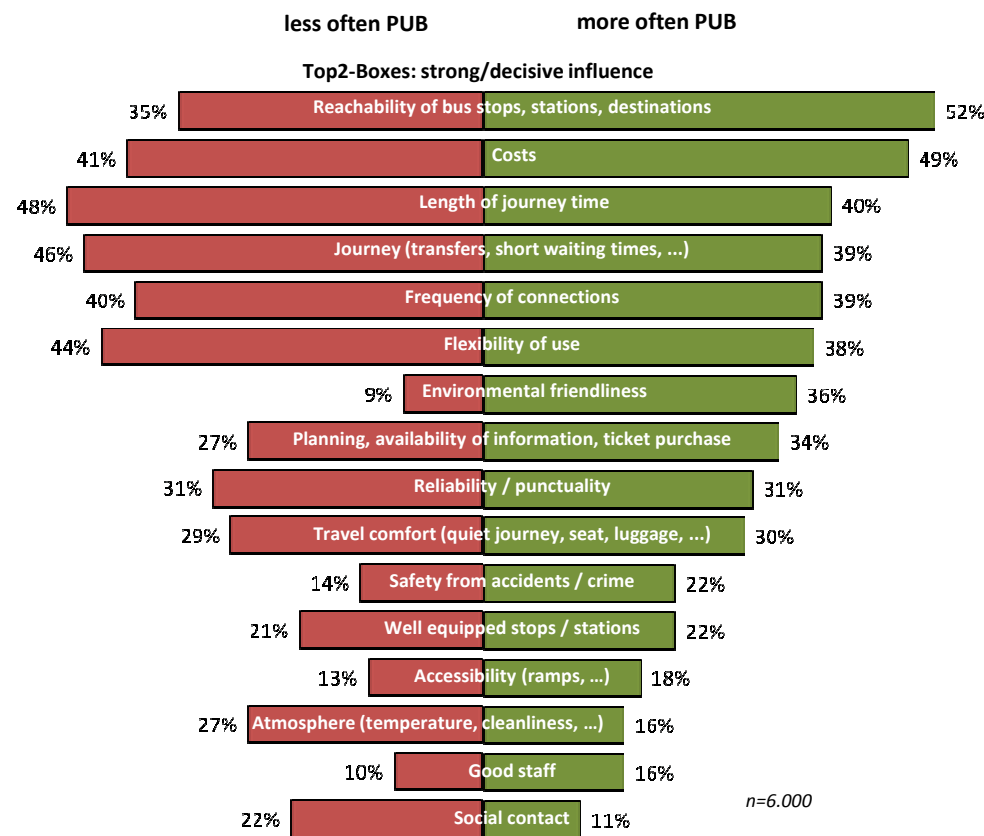
Characteristics of public transport offer: pull-in and push-out effects

The USEmobility survey has revealed that classical ‘hard’ offer-related factors influencing the modal choice have the highest decision relevance in both the decision to use public transport and multimodality more often and, on the contrary, to quit public transport. Hard factors include reachability, costs, journey time, waiting times, number of transfers and the frequency of connections.

Eco-friendly multimodal mobility”

The influence of so-called ‘soft’ offer-related factors is less pronounced than the influence of ‘hard’ factors, but still considerable. Among the soft factors, flexibility, planning effort, availability of information and environmental friendliness have the highest relevance, followed by comfort of travel, atmosphere on the journey, and staff. Soft factors like atmosphere or social contact are more often a reason to leave than to enter public transport. This means that soft factors, with exception of environmental friendliness and travel comfort, do not usually work as strong pull-in factors alone. They rather have the character of a booster, if hard factors generally meet swing users’ expectations. However, in case of poor performance, they can have a strong push-out effect. Therefore they should be taken seriously.

Importance of selected push-out and pull-in factors concerning public transport



(PUB = public transport)

The comprehensive USEmobility report

‘Factors influencing behavioural change towards eco-friendly multimodal mobility’ can be downloaded here: http://usemobility.eu/sites/default/files/resources/usemobility_wp3_d3_6_v2b.pdf.



“I don’t know a comparable study in the United Kingdom.” Frank Klingenhöfer, Intergroup Relationship Director, Arriva UK Trains.

Implications for stakeholders



“The findings of the USEmobility survey designate directions to keep the passengers, and to get new passengers who intend to switch transport mode. These are very useful for professionals who work on service improvement.”
Imre Perger, Consultant, MÁV-START Railway Passenger Transport Co., Marketing and Service Development Department.

The USEmobility survey has shown a lot of dynamism in people’s modal choices, but also that movement towards and away from public transport is still nearly balanced. This means: there is no automatism leading to a higher share of eco-friendly multimodal mobility. In fact, all players involved should take action.

Based on the project’s results, USEmobility has formulated **strategic recommendations** addressing various stakeholders: **decision makers in politics, the European Commission, providers of transportation services and civil society organisations.**

These strategic recommendations are focusing on the main areas of action, and are of a general nature, which means that they are transferable and applicable to a variety of situations, countries and regions, as the given status quo (exact constellation of stakeholders and their respective levels of authority, legal framework, financial potentials, available infrastructure, technical situation, level of public transport services etc.) differs considerably from country to country.

The strategic recommendations are intended to help stakeholders to recognise opportunities in their own country or region, and to inspire them to work out a strategy for user-oriented development of the public transport system, and therefore to foster eco-friendly multimodal mobility.

Providers of transportation services: Seize the chance for more customers

The areas of action most relevant to providers of transportation services are the characteristics of the services offered and taking into account the travellers’ personal background.

Transportation companies aiming at more passengers and a higher market share for public transport and multimodality, should work systematically on both attracting new customers for public transport by strengthening pull-in factors towards public transport, and keeping public transport users from leaving the system by minimising push-out factors of existing public transport offers.

Aspects highly relevant for users’ decision making processes are:

- Well coordinated services (intra- and intermodal).
- Greater consideration and individual attention shown towards potential customers’ personal situation.
- Satisfying ‘hard’ factors, as well as ‘soft’ factors.



Selected examples to illustrate opportunities for action:

Within the area of action related to travellers' personal background, transportation companies should, for instance, tap the potential that lies in directly addressing people in situations of change. In all USEmobility countries swing users stated that changes in their personal situation had a major impact on their behavioural change. Nevertheless, systematic assistance to people whose personal situation is changing is still usually missing. Providers could proactively send comprehensive information on public transport and multimodal services to this promising target group (e.g. **welcome packages** to people who have moved recently). The packages can be combined with further marketing tools, such as welcome discounts for new passengers.

With respect to the 'services offered' area of action, especially short travel times, attractive tariffs, the availability of direct connections, frequency of connections, extended times of operation and flexibility are highly relevant for users' decision making processes. Users expect well coordinated services (intra- and intermodal). Measures like **common tickets** which allow passengers to use different public transport services with only one ticket regardless of the providing company will contribute to both customer retention and attracting new customers. The same applies to **better integration with other modes of transport** (park & ride and bike & ride, as well as integration of car-sharing or bike rental services). **Integration of new services** can also be a chance for the transportation companies to establish new and promising business models.

Transport policy: Giving priority to public transport and multimodality

The area of action most relevant to transport policy is, unsurprisingly, the policy framework. Indeed, policy choices in the field of transport have considerable influence on users' decision making processes. In addition, in most European countries, national and local authorities and administrative bodies co-determine the characteristics and standards of the services offered, so that this is also a relevant area of action for transport policy, as well as consideration of travellers' personal background.

Transport policy aiming at more sustainable transport and a higher market share for public transport and multimodality, should follow a dual approach: on the one hand improving the attractiveness of the public transport services

USEmobility: First impacts in practice

*Welcome packages
for new inhabitants in Austria*

The USEmobility consortium is happy to see that the insights gained during the project already had practical consequences. Inspired by a meeting of the USEmobility Business Advisory Group in 2011, the Austrian transportation company ÖBB (S-Bahn Salzburg) has started in 2012 cooperation with housing enterprises. People moving in receive a comprehensive information package about the S-Bahn services (suburban railway services) including a gift coupon for public transport tickets. The method is currently being rolled out to other regions in Austria.



“The USEmobility design is new and innovative. The public transport users and their behaviour are not as static as many think, now we know better where to begin.”
Hans Leister, Head of Center Regional Transport and Quality Management, Verkehrsverbund Berlin-Brandenburg (Public Transport Authority).

Experience from USEmobility countries

Strategy to support modal shift in Belgium

The Brussels region in Belgium wants to promote modal shift to public transport, cycling, walking and carpooling. The general aim is to reduce car traffic in the Brussels region by 20 percent by 2018. Part of the strategy will be mandatory mobility plans for all employers with more than 100 employees. The mobility plans should develop measures to motivate employees to switch to public transport.



offered, and on the other hand abandoning incentives for monomodal car use. The action is needed on the EU level to achieve a coherent and supportive policy framework has two dimensions, which should be well-coordinated: On the one hand, priority for public transport and eco-friendly multimodality must be reflected in the EU's own policy choices, not least in EU funding policies. On the other hand, the EU level should support initiatives on member state level to foster public transport and multimodality.

Aspects highly relevant for a coherent and supportive policy framework are:

- Clear targets and clear policy choices in favour of public transport.
- Integrated policies. Of particular importance is better integration of urban and spatial planning into transport policy, as well as better integration of environmental and climate policy, energy policy and health policy.
- Effective coordination of the different policy levels and clear distribution of tasks between the players involved.
- Reliable and sufficient funding in order to realise more and satisfying public transport services.

Selected examples to illustrate opportunities for action:

Well-directed infrastructure investments, for instance, can be an effective instrument for transport policy wanting to motivate more people to opt for public transport and multimodal combinations. As better reachability and shorter travel times have a considerable influence on people's modal choices, transport policy should invest in public transport infrastructure (new stations or stops, upgrading existing infrastructure or new infrastructure), as well as in multimodal infrastructure making it easier to combine different modes of transport (e.g. park & ride facilities and bike & ride facilities). The impact of infrastructural measures can be intensified by **urban and spatial planning strategies** that establish settlement structures facilitating the use of public transport and multimodality.

With respect to the services offered, people expect clear signals from transport policy. It is crucial that transport policy supports a public transport offer which is a real alternative to private car use, including **sufficient capacity** in order to enable further growth. As a basis, it is important to establish structures that guarantee a clear distribution of tasks between the players involved, and provide clear **incentives to attract more passengers**. Such incentives are not least important for public service contracts between public transport authorities and providers of transportation services and should enable transportation companies to be innovative and customer as well as market-oriented.

Civil society organisations: Make the users’ needs and concerns heard

For civil society organisations willing to take action in the field of sustainable transport, the policy framework is a relevant area of action, as well as the characteristics of the services offered and the travellers’ attitudes and concerns.

Civil society organisations to be considered in the context of more eco-friendly mobility are, for instance, consumer and passenger organisations, environmental organisations and trade unions, as well as citizens’ groups, senior citizens’ organisations, or educational and training organisations. The different civil society organisations must develop their own strategy, one which is most suitable to the organisation’s focus, size and capabilities and which enables them to be present and visible in the public debate.

With respect to eco-friendly modal choices, civil society organisations can contribute to bridge the gap between users and decision makers in politics as well as in transportation companies. Furthermore, they can contribute to connect the debate on mobility with environmental issues, energy policy, health aspects and urban and spatial planning.

Selected examples to illustrate opportunities for action:

First of all, CSOs can **sensitise providers of transportation services and public transport authorities to the users’ needs and concerns**. CSOs can support improvements in the public transport system by making concrete proposals on how to eliminate the practical problems that users are confronted with. By establishing institutionalised cooperation with transport policy and transportation companies (e.g. advisory boards), the expertise of civil society organisations can be integrated more intensively and regularly.

Besides sensitising providers of transportation services and public transport authorities to users’ concerns, civil society organisations can also **take action themselves**, e.g. by taking part in projects addressing people in situations of change, by offering information and advice regarding eco-friendly multimodal mobility, by taking part in research projects or projects on knowledge transfer or by running awareness-raising campaigns.

“The USEmobility recommendations gave us important hints for discussion on the future development of our federation.” Josef Schneider, Member of the Administrative Council, Secretary, European Passengers’ Federation.



Experience from USEmobility countries

Eco-friendly multimodal mobility explained to non-users in Belgium

*In 2011, the Belgian passenger organisation **TreinTramBus** initiated in cooperation with other organisations the project “OV-ambassadeurs” (Ambassadors for public transport). The project wants to encourage senior citizens to switch from car use to eco-friendly public transport (bus, train, tram and metro) by offering workshops in which the participants get information and advice on how to use public transport. The workshops use a ‘peer-to-peer’ approach. Workshop organisers and target audience belong to the same generation: senior citizens.*

Working with USEmobility: targeting travellers



Experience from USEmobility countries

One ticket for tomorrow's customers in Germany

Special season tickets for teenagers are an interesting example of tariff offers for specific customer groups. The transport association Verkehrsverbund Rhein-Ruhr offers pupils the so-called 'SchokoTicket', which is valid not only on the direct way from home to school, but for all public transport services in the entire area from the Lower Rhine to the eastern Ruhr Area. The aim is that pupils, i.e. tomorrow's customers, become familiar with public transport for all their mobility needs from travelling to school to all kinds of activities in their spare time.

The development of more eco-friendly multimodal mobility must be understood as a structural task that makes demands on many stakeholders and as an ongoing process. A strategy towards more eco-friendly multimodal mobility can only succeed if it is effectively coordinated between all stakeholders involved and integrated with other policies on all policy levels. It is important to set clear targets to make sure that all players pull in the same direction.

Communication, image and emotions

Mobility begins in the mind. In order to achieve a higher share of eco-friendly mobility it will be decisive to make sure that people are 'on board'. All measures taken must be accompanied by **clear communication towards users and non-users** of public transport. Communication should not only address the relevant facts, but also aspects like **image and emotions**, as well as the benefits of eco-friendly multimodal mobility for the users and the society as a whole. Today, a more emotional, lifestyle-oriented approach certainly has potential, especially if one considers that not only among younger people new attitudes and new values can be observed. Public transport has the opportunity to be associated with modern mobility, including the freedom to be online, to work, and to relax, and be accompanied by a good environmental performance.

Use the USEmobility strategic recommendations

The following documents with USEmobility strategic recommendations can be downloaded here:

<http://www.usemobility.eu/resources/reports>:

- D5.1: 'Strategic recommendations to decision makers in politics'
- D5.2: 'Strategic recommendations to the European Commission'
- D5.3: 'Strategic recommendations to providers of transportation services'
- D5.4: 'Strategic recommendations for involvement of civil society organisations'

USEmobility Survey of Users who have changed their Mobility-Mix

1. Introduction

1.1 Aims of the Survey

USEmobility surveyed citizens in six European countries to analyse their behavioural patterns when choosing their mode of transport. A representative picture has to be drawn of the findings. The aim of the survey is to discover the individual reasons that lie behind selecting a mode of transport. Particular focus is placed on the reasons that, from the point of view of the survey participant, led them to decide to make more use of an eco-friendly mobility mode, such as public transport. The analysis is set up to reveal the extent of the role played by multimodal travel.

The survey is very comprehensive. It deals with factors relating to the range of mobility services on offer as well as with factors rooted in the mobility needs and the traveller's personal circumstances. It highlights public transport's potential for attracting new customers and simultaneously examines factors relating to customer retention.

1.2 Survey Approach

The survey is solidly anchored in a representative selection of citizens who have changed their preferred mode of transport in the last five years. We call these travellers swing-users. We understand this as including both, people who have completely changed to another mode of transport as well as travellers who have altered the weighting (of a particular mode) within their mix of multiple transport modes ('mobility-mix').

From the perspective of users who have already shifted their use of modes, we asked travellers for their main reasons for changing. Participants were additionally asked about detailed reasons for change to find out, which motives are behind the main reasons already stated.

All the travellers who have shifted their use of modes are placed within a USEmobility palette of socio-economic, socio-cultural and psychological characteristics. The analysis concentrates on the following dimensions: *cause for change*, *direction of change* and the *environment* in which the change took place. What was the situation that led to the change? Was the reason external and did it therefore not primarily have anything to do with mobility issues? Altogether, it is important to factor the user's personal circumstances into the analysis as broadly as possible. From which position did the user change, and where to? The ebb and flow between public transport and motorised personal transport is of particular importance. What mobility choices were on offer when the change was made?

Once this analysis has been completed, a clear distinction can be made between different circumstances: was it the attractiveness of the new transport mode (pull-in factor) or was it

unhappiness with the old transport mode (push-out factor), which primarily influenced the decision? As potential factors for change, the questionnaire did not just list hard, clearly definable parameters such as punctuality and cost, but also 'soft factors' like feeling safe or design issues.

An analysis of the information provided by users made it possible to develop a profile for those users who simultaneously show characteristic behavioural patterns for change and great potential for making increased use of multimodal transport chains. These groups are especially interesting when it comes to making recommendations to policy makers or transport companies.

The USEmobility survey covers issues relevant to transport policy and was carried out in cooperation with six European countries from Belgium to Croatia. It focuses on the similarities found in Europe but also identifies characteristics distinctive to a specific country. In addition, ten surveys were carried out, mainly in regions where particularly successful public transport or multimodal transport services had managed to become established.

1.3 Scope and Limits of the Survey

USEmobility is following an innovative approach and does not simply rely on the users' stated intentions to make the desired decision on their mobility. To take part in the USEmobility survey, users had to say that they had actually changed their behaviour within the last five years. Depending on the reason for travelling, this was the case for up to 50 percent of those who were initially asked, so that it can be stated that almost half of all travellers can be regarded as swing-users.

The USEmobility team chose a survey methodology that enabled it to reconcile aspects of psychology and sociology, which are hard to grasp, with hard facts. The remarks made by users and other parties in the ten chosen regions with the best public-transport practices were particularly valuable.

Decisive questions guided us through this process: Does the choice of transport mode have a more static and personal character? Was the decision in favour of a new transport mode made suddenly or was the change gradual? The answers to such questions are critical with regard to attracting new customers. Why was the user's role in making the decision to change hitherto not considered? Is it enough to offer a good range of services? Was the importance of soft factors influencing the decision to change previously underestimated? Are there distinct factors for attracting and retaining customers?

Most of the conclusions of the survey are representative of the motivation and behaviour of swing-users. Only a few of the questions were formulated to be representative of all citizens. In contrast with the survey covering a whole country, the regional surveys make no claim to be representative.

Whereas official transport forecasts use transport-performance reference values that make it possible to state the exact market share (modal split) of the different modes of transport, the reference value applied by USEmobility is the change in frequency of use as perceived by

users. The survey is not designed to collect data on the exact quantity of transport-kilometres and therefore cannot be used to determine any changes in the modal split.

However, better understanding behavioural change-patterns is a basis for recognising further potential for increasing the modal split of public transport.

2. Central Statements

2.1 New Insights

Our survey delivered a series of new, partly surprising insights: When choosing the mode of transport, users' behaviour is far more dynamic than examining the modal split, which appears to be static, would lead us to believe. Almost half of the participants said that they had changed their mobility behaviour patterns in the last five years. This throws a new light on the prevalent market share analyses, which show that overall there is very little dynamism in the choice of transport mode. For practical purposes, this insight is of great importance: Where there is a great deal of movement there is also the opportunity for policy makers and companies to motivate travellers to decide in favour of public transport.

Today, already half of all people belong to the group of swing users. Within this group, only 30 percent travel using mono-modal transport, compared to 40 percent who are pragmatic in deciding which mode of transport suits their purpose. Most rearrangements in the personal mobility-mix were made when the participants were deciding how to travel to work.

Thirty percent were aware of the advantages of combining multiple modes of transport for their journeys and changed their behaviour accordingly. Choosing the transport mode is therefore not so much a case of either/or, but a dynamic case of 'both, one as well as the other'. For the majority of swing users, multimodal travel is already a reality.

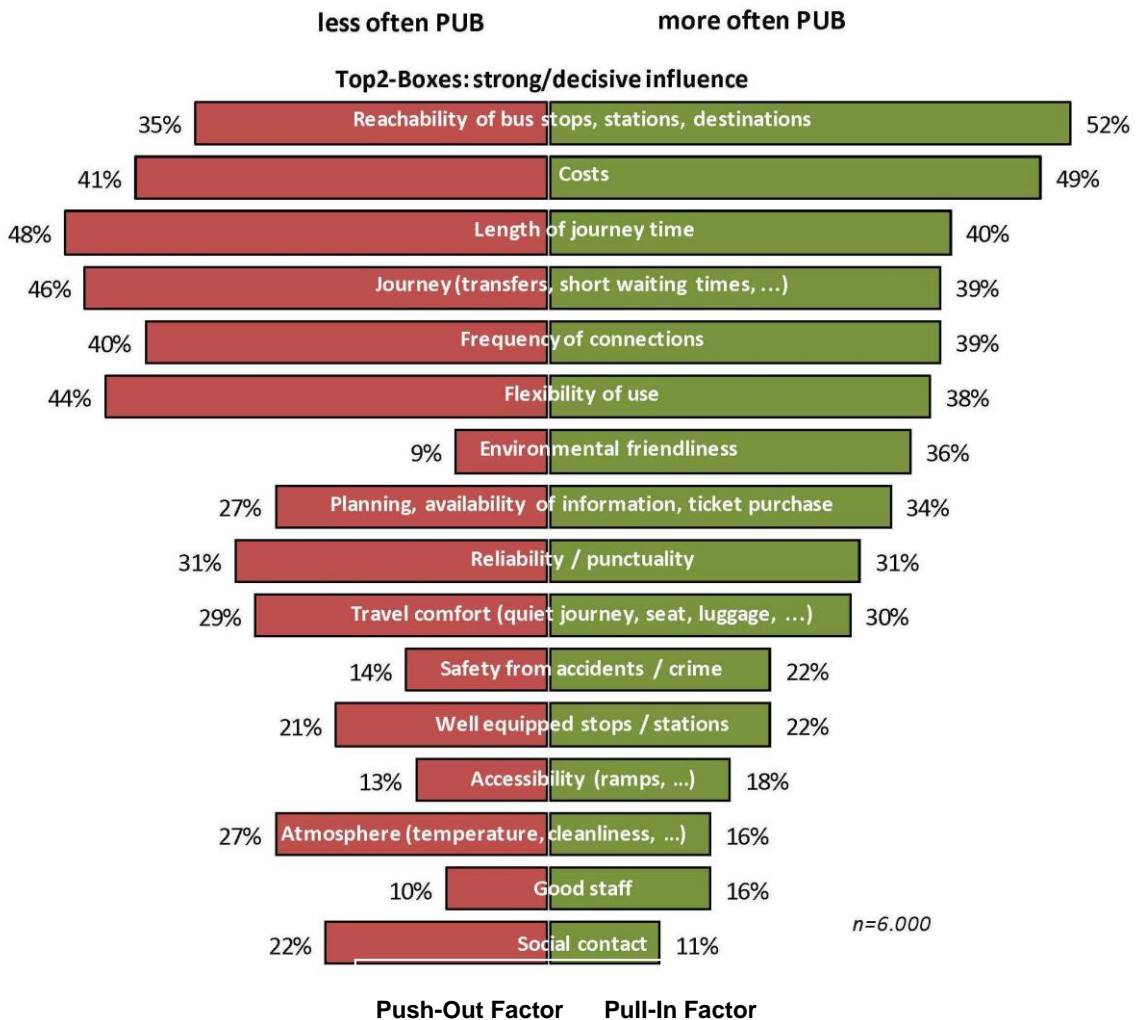
If people decide to make greater use of public transport, the share of those who completely change to public transport and no longer use any form of personal motorised transport is nevertheless nearly 30 percent. Overall, the change to public transport is by no means always due to the person not owning a car. Multimodal users of public transport make a conscious decision when to choose their cars, and when not. Altogether, with increasing age, there is a higher degree of freedom-of-choice among swing users. Older people often own a car but, nevertheless, show a greater flexibility in deciding whether or not to use public transport in any given situation.

Above all, the cause for shifts in the mobility-mix is characterised by changes in users' personal and private circumstances. Over half of participants stated that personal reasons were the motivation for their reorientation. Such changes in life circumstances relevant to the choice of transport mode do happen frequently. On average, almost three such relevant changes occurred within the last five years.

The top ranked reasons, in terms of frequency and relevance, are *changing jobs* and *moving home*, whether to another town or within the same town. This insight offers providers of transport services a good opportunity to attract new customers to public transport.

The circumstances for change are characterised by factors that cause users to feel unsatisfied and therefore motivate them to shift away from their preferred mode of transport (push-out factors), as well as, of course, by encouraging factors that motivate them into changing to a new transport mode (pull-in factors). Both types of factors are characterised by what the transport companies offer users. For public transport, pull-in factors have a greater effect than push-out factors, which means that travellers are more likely to decide to make changes for reasons of satisfaction as opposed to making changes because they are dissatisfied.

Importance of selected Push-Out and Pull-In Factors concerning Public Transport



For such decisions, 'hard' factors such as availability, price and travel time were obviously of central importance. In order to attract new users, providers of public transport must create good conditions. However, there are only few factors - apart from cost - inherent to motorised individual transport that will dissuade people from using their cars or motorcycles.

Especially in terms of user satisfaction, 'soft' factors also play an important role alongside a given transport-mode's 'hard' factors. The former include aspects such as *flexible* and *easy to plan* journeys, as well as the environmental impact. Overall, participants evaluated sustainability and eco-friendliness as important issues. This was demonstrated by the fact that, among other things, 88 percent of the swing users were willing to pay a certain amount of additional cost for improved environmental performance of a mode of transport.

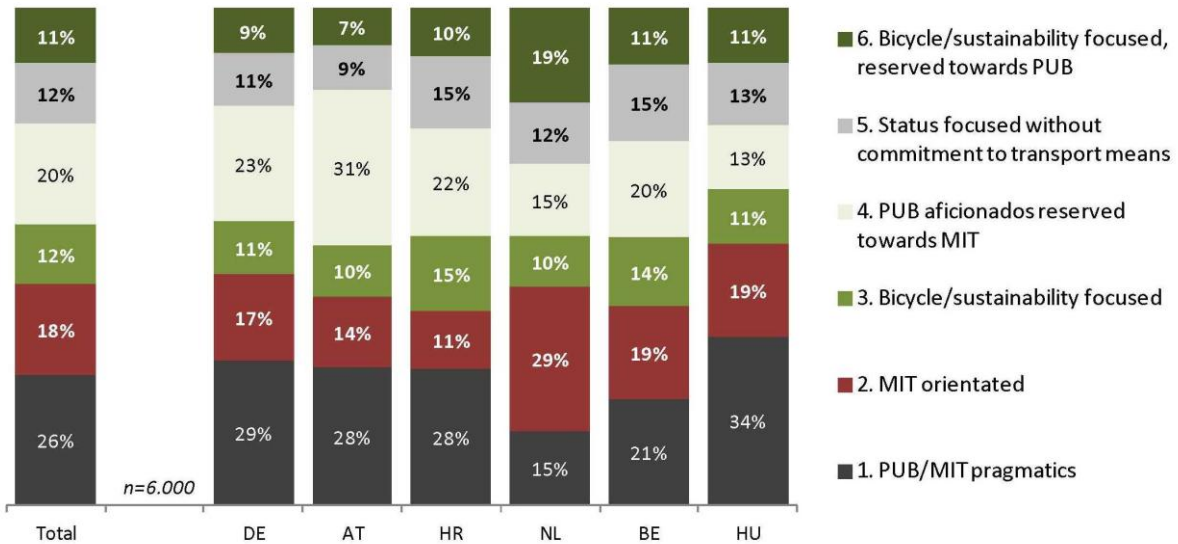
Users expect satisfying 'soft' factors to be in place if they are to remain true to a mode of transport. In particular when new, comparable transport alternatives are offered, these factors once again become the subject of users' attention, and aspects such as *comfort*, *personnel* and *atmosphere* become relevant factors when decisions are being made.

It is interesting to note that compared with public transport providers, the automotive industry puts far more emphasis on emotions when addressing its customers. As a result, for swing users, motorised individual transport usually has a positive, but in any case a distinctive image profile. Public transport retains its customers in a far less emotional way. At most, the participants associate dimensions such as *urbanity*, *rational behaviour* and *communality* most strongly with public transport. Public transport could certainly gain some leverage from projecting a more emotional image.

2.2 Swing User Profile

For citizens who change their previously chosen mobility-mix from time to time, the shift takes place in all directions, but can be observed above all between the categories *motorised individual transport*, *bicycle* and *public transport*. In cases where there are changes, there are some occurrences where the participants have generally reduced or generally increased their level of mobility. Mostly however, the emphasis on one particular transport mode is shifted to another mode in the mix.

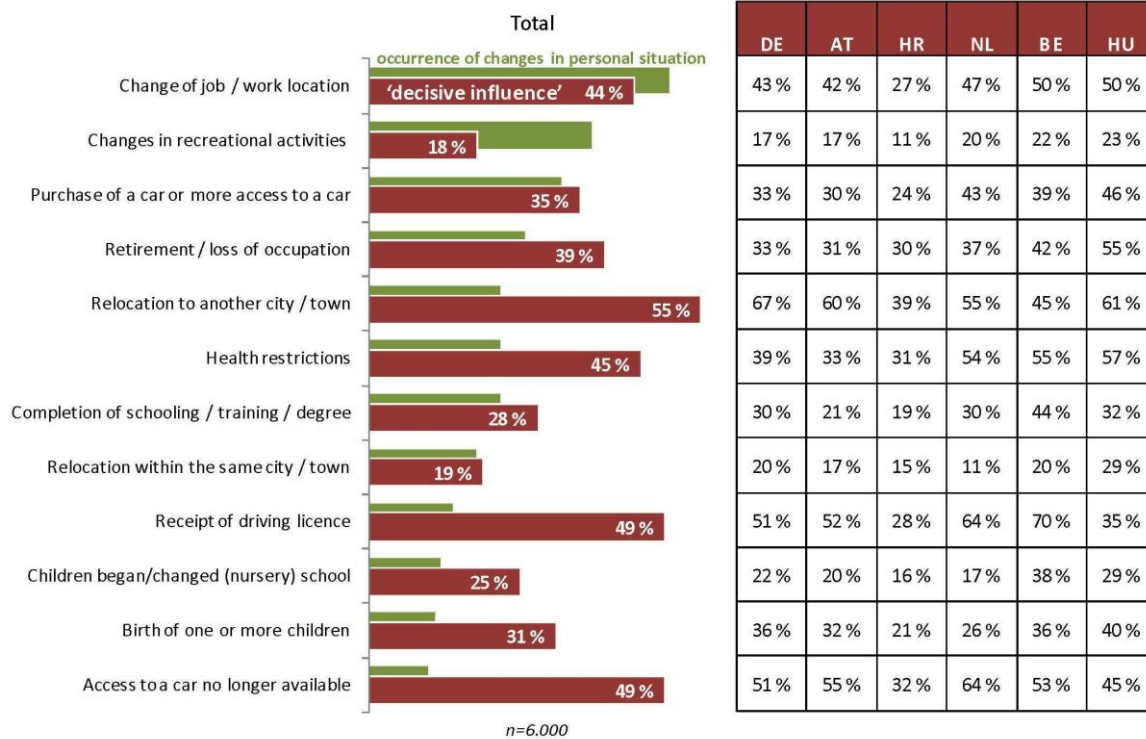
For users, the decisions to change are based on their own personal background and attitudes. According to their attitude towards different modes of transport, the swing users can be more precisely subdivided into various segments.



The most important group of swing users covers the public transport / motorised individual transport pragmatists (segment 1) with 26 percent. These people take a pragmatic point of view when choosing their mode of transport. They make different decisions according to the situation they are in and are the most dynamic in their behavioural patterns. Another important segment covers the advocates of public transport who are somewhat reserved in their attitude towards motorised individual transport (segment 4). The distribution of the attitude segments is specific to the country. For example, German and Dutch swing users focus on quite different priorities.

The swing users can also be characterised according to their life circumstances because change here also follows definite patterns. In most cases, a cause for change already existed that motivated the user to think about shifting to another transport mode. This could have been moving home or a new phase in their working life, from starting the first job to retiring altogether. In such situations, the survey participants thought about whether they were satisfied with their previous choice and looked to see if there were any better alternatives available.

Occurrence and Importance of Factors related to the personal Life Situation



Alongside personal attitudes and the cause for change there are additional attributes characterising swing users.

Those in urban environments, for example, tend towards making greater use of public transport; in rural areas, there are a greater number of changes towards motorised individual transport.

3. Country Portraits

The insights gained are very similar in all the countries that were surveyed, suggesting that they are also applicable to other European countries that did not participate in the project. Nevertheless, we also observed a series of characteristics specific to individual countries. Whereas the characteristics of change and reasons for change showed hardly any deviations, user characteristics displayed large differences. Satisfaction with public transport also varied from country to country, although there were also large differences between regions in individual countries.

3.1 Belgium

Belgium has, with the capital Brussels, its political and administrative centre and at the same time, if the prevalent clichés can be believed, one of the most heterogeneous communities in the EU. The USEmobility project did actually find indications for this: while 30 percent of Flemish swing users were satisfied with public transport services, in the Walloon region and Brussels it were only 20 percent.

Altogether, public transport in Belgium is regarded as being mainly an urban transport mode. Typical push-out factors for Belgian public transport are lack of punctuality (for ca. 50 percent a decisive factor) or journeys that are too complicated (changing, waiting times etc. for ca. 60 percent). However, motorised individual transport also displayed stress factors, for example, the high risk of traffic congestion, which is the reason behind 84 percent of those swing users who high-ranked the MIT push-out factor "punctuality problems."

Safety from accidents is in Belgium a considerably larger factor in favour of public transport than, for example, in the Netherlands. The opposite is true for safety from crime.

3.2 Germany

Among Europeans, Germany is regarded as being well-organised - public transport included. For example, Germany's railways are considered very punctual. At the same time, the opposite view holds that Germany is a country that is completely dominated by the car.

In fact, our survey showed that motorised individual transport in Germany has a strong image linked with mainly positive attributes such as *fast*, *spontaneous*, *exciting*. In contrast to the cliché, that Germany is a nation of car drivers, the USEmobility survey also showed that the frequency of change in Germany is particularly high. For journeys to the place of work, more than 50 percent of those surveyed have made changes to the way they use public transport in the last five years. Additionally, Germany also has the highest rate of multimodality (77 percent) out of all surveyed countries in Europe. When it comes to multimodal journey chains, 42 percent of swing users travel with multiple modes, usually in a combination of cars and public transport.

Satisfaction with personnel still has some issues in Germany. On average we have recorded 10 percent less swing users who are happy with personnel than in the other countries.

3.3 Croatia

The rest of Europe regards the acceding EU member Croatia's transport infrastructure as being in need of modernisation: Public transport is underfunded; its citizens have a lot of catching-up to do in terms of individual transport; environmental issues tend to have a low priority.

The USEmobility survey did not confirm this picture. It even showed that Croatia has the lowest swing user rate, and there is only a very small image difference between public and motorised individual transport.

Whereas those surveyed characterised Croatia's public transport as 'social' and 'less aggressive', switching to motorised individual transport is actually considered less attractive than in other countries. As a reason, people cited the high cost of purchase and repair, and the running costs.

In comparison with other countries, the willingness of Croatians to increasingly organise mobility in line with sustainability and environmental considerations is actually particularly high. 28 percent of participants are planning to do so, with 31 percent stating that they are not willing. 70 percent of swing users state that they would be prepared to pay 10 percent and more for a transport that was more environmentally friendly.

3.4 The Netherlands

The Netherlands are seen by Europe as a country of cyclists. The Dutch are liberal and open-minded towards public transport it is said. Judging by the USEmobility survey, the very opposite is the case. It shows that in the Netherlands, 43 percent of swing users make strictly mono-modal journeys, more than in any other country in the survey. Overall, more than half the swing users regularly use a bike (78 percent are regular cyclists); however, 65 percent use motorised individual transport (mono and multi modal). Only 45 percent of those who switched to make more use of public transport were motivated by their own experience - in comparison with 66 percent in Germany. Only 13 percent of those surveyed are unhappy with their current choice of transport mode.

The segmentation based on attitudes shows that only 15 percent of Dutch swing users are pragmatists; 19 percent have an affinity with cycling but astoundingly display a very reserved attitude towards public transport. Seven percent of swing users are planning to use public transport more often in the future; however, 40 percent rejected this idea.

3.5 Austria

Transport in the Alpine state Austria is characterised by a typically strong contrast between urban and rural areas. The fact that the mountains restrict the space available for transport is more than a simple cliché. However, the rest of Europe regards Austria's public transport system as being well funded and properly organised by the state.

Largely this view correlates with the results of our survey: Austria displays a high level of multimodality (75 percent). Within one journey, almost 40 percent of swing users travel combining multiple modes and, by doing so, demonstrate the flexibility with which Austrians counter the difficulties in travelling in the geographically challenging Alpine state.

Customer satisfaction with public transport is high in Austria, with a 43 percent satisfaction rate and only 7 percent stating that they are unhappy with services. The aspects *good availability of destinations*, *low environmental impact* and *good accessibility* of services were particularly important here.

Overall, public transport has a positive image and is perceived as being social and urban. 31 percent of swing users have an affinity with public transport while simultaneously having reservations about individual transport. For this group, a series of soft factors also count against motorised individual transport. They feel there is less time to relax or spend on other activities. In addition, the parking situation is often bad, which is something that puts many Austrians up against using motorised individual transport.

3.6 Hungary

Similar to the Croatian case, Europeans believe that Hungary needs to modernise. According to the cliché, the country's public transport system is poorly developed and uses out-of-date rolling stock; there is a lack of funding for appropriate infrastructure measures; Hungarians have to be pragmatic about the services available to them.

In fact, the results of the USEmobility survey show that the Hungarian transport market is highly dynamic. However, in the competitive environment between public transport and motorised transport, the ratio of strict swing use is balanced at 20 percent for each direction of change. The picture is similar for satisfaction / dissatisfaction with the current mode of transport: 20 percent are satisfied compared with 18 percent who are dissatisfied. The rate of change is high with the share of swing users reaching almost two thirds.

In cases, where Hungarians perceive a public transport service to be modern, this is a result not only of low costs, but also soft factors such as *safety from crime*, or *clean* carriages with *air-conditioning*. However, if there is a lack of cleanliness or comfort, or if bus stops and stations are inadequately equipped, travellers will decide against public transport.

34 percent of swing users are pragmatists. 28 percent are planning to use park & ride facilities once they've become available; 32 percent are not planning to do this. The Hungarian transport companies seem to have missed an opportunity regarding their information policy: Only 7 percent of swing users stated that they had received information from transport providers about their services.

4. Regional Success Stories

Surveying travellers in mainly railway-based public transport systems in selected European regions delivers highly interesting insights into the choice of transport mode in environments with best practice cases. Here are several examples:

Efficiently networked rapid-transit train systems such as the *S-Bahn in Salzburg* and the *S-Bahn Rhine-Neckar* guarantee a high degree of multi-modality. Less than 10 percent of swing users of the S-Bahn Salzburg use only the S-Bahn. For almost 40 percent, the S-Bahn is a permanent component of a combined journey chain comprising several modes of transport. Just 4 percent of the Rhine-Neckar swing users are solely S-Bahn users. For 80 percent the decision to use the S-Bahn or another mode of transport depends on the journey's purpose.

For customers of the *S-Bahn in Breisgau*, their primary reasons for changing show a typical profile for swing users in well-developed regional transit systems. Hard factors such as cost, frequency of service and accessibility of train stations are important reasons for change for more than half of those questioned. However, for 40 percent of those surveyed, soft factors such as travel comfort, flexibility, eco-friendliness and easy-to-plan journeys are also decisive for increasing their use of public transport.

Public transport customers in the Croatian capital *Zagreb* are more satisfied with the services on offer (45 percent) than in the rest of the country (on average 32 percent). 60 percent of those surveyed in Zagreb saw particular improvements in travel comfort and accessibility. When deciding to change transport mode, ease of accessing trains is 20 percent more important in Zagreb than in the rest of Croatia.

In most cases, choosing the mode of transport is a process. This is not so in Gelderland in the Netherlands: 60 percent of users of the *Valleilijn* train service made their decision from one day to the next. Particularly significant factors here were change of workplace (68 percent) and moving home (70 percent).

Among users of the *S-Bahn Steiermark* or the rail-connection *Varazdin-Medimurje* in Croatia there were a disproportionately high number of young people who had just completed their job training (43 percent in Steiermark and 41 percent in Croatia). This customer group cited 'cost' as one of the most important reasons for the increased use of train services. In addition, satisfaction with the performance of the S-Bahn is high at 75 percent.

75 percent of users of the route between *Budapest and Esztergom* in Hungary were motivated into using the train service by friends, family or colleagues. This 'word-of-mouth' was particularly significant since most of those questioned (80 percent) already had alternatives. For users of the *Metronom* service between Hamburg and Cuxhaven, motivation again was not a result of their own experience with the railways, as is the case for the average swing user. In this case, other information channels played a larger role: For example, information made available by the service provider, or even by employers for people starting new jobs, were decisive factors for changes in the choice of transport mode.

Metropolitan regions such as *greater Brussels* show a typical urban background. Many swing users have recently moved to the area (65 percent) and many do not have (or no longer have) a car (75 percent). The reasons for switching to the public transport system *STIB/MIVB* are mainly the transport-mode's eco-friendliness (48 percent) and the good accessibility of bus stops and train stations (54 percent). At the same time, more than half of users say that reliability of information and journey scheduling has improved considerably.

5 *Basis for Strategic Recommendations*

The approach used by the USEmobility project was clearly innovative. None of the previous research into personal mobility has focussed on swing users with the aim of better understand their motivation and gaining useful insights from this perspective for developing future mobility. Although the modal split has hardly changed for years, the USEmobility survey has shown that behind the apparent lack of movement there is considerable dynamism, with fluctuations both towards and away from public transport. The second important insight is that people are afforded a multitude of opportunities for rethinking their choices, and that these often go hand-in-hand with changes in their life circumstances. Above all, changing place of work leads to people questioning their usual behavioural mobility patterns.

Since it can be assumed that there is a general desire for mobility to become increasingly eco-friendly in the future, there is now an opportunity to take more notice of users' needs. For the stakeholders who are involved in this project, USEmobility will develop strategic recommendations. These are developed, on the one hand, for politicians who set on a national and local level the policy framework for sustainable transport. They also include the European Commission, the contracting authority for this project, which wants to further develop European transport policy ensuring that citizens' mobility is both, environmentally friendly and sustainable in the future. The recommendations are also directed at providers of transport services, who can attract new customers with made-to-measure offers. Particularly in metropolitan regions, there is considerable potential for public transport, which can benefit from a user-oriented approach incorporating decisive hard and soft factors to attract and retain customers.

We will pay particular attention in our recommendations to civil society organisations that consolidate and represent the interests of passengers. As part of the process of improving the policy framework and the offered services, as well as customer service, these passenger groups play an important role that will have to be strengthened in the future. Only then can it be guaranteed that the needs of the individual (customer, passenger) will be at the centre of this development.