



Transport  
Innovation  
Deployment  
for Europe



# ***GUIDELINES FOR IMPLEMENTERS***

## **People-friendly streets and public spaces**

TIDE is a Coordination Action funded by the European Commission's DG Research and Innovation under the 7th Framework Programme for Research and Development.



## What is it about?



Car-reduced neighbourhood, Vauban, Freiburg, Germany

Source: IDTP, 2011

### Car-reduced neighbourhood, Vauban, Freiburg, Germany

Car-reduced neighbourhoods use a combination of “push” measures to discourage private car use and “pull” measures to improve the attractiveness of walking, cycling, public transport and various forms of shared vehicle use. For example, Vauban, one of the most celebrated model sustainable districts, has seen greatly reduced car ownership and significant bicycle use for routine trips as tangible benefits of the policy and design strategies. The key to success was decoupling parking from housing, meaning both car ownership and residential use is no longer the default scenario: 40% of parking-free households do not have a car, and 41% of car owners use a bicycle more than they did before.

### Characteristics

If you design for cars, you will get cars. But if roads and public space are designed from a human perspective, they will attract pedestrians and cyclists.

Auditing tools can be used to systematically review pedestrian or cycling environments and provide further justification for improvement and investment.

Consultation with, and input from, local communities is essential.

While people-friendly spaces cater to vulnerable road users like children and older people by reducing traffic speed and increasing safety, the end result is that such spaces are friendly to all.

Anything from single intersections to entire neighbourhoods can be made people friendly.

This measure is transferable all over Europe, but must be tailored to the local context.

### Key benefits

#### People-friendly streets and public spaces:

- create better quality of life for all with less social exclusion;
- improve traffic safety for cyclists and pedestrians;
- encourage people to shift short car journeys to walking and cycling;
- provide more customers to local retailers.

## Check list

City size	No restrictions – it can be applied to a street corner or an entire city.
Costs	<ul style="list-style-type: none"> <li>• Integration with urban renewal schedule can reduce costs.</li> <li>• High quality materials – however costs can be justified to reduce maintenance and vandalism.</li> </ul>
Implementation time	<ul style="list-style-type: none"> <li>• Relative to the size of the scheme.</li> <li>• An open public consultation process can take quite a bit of time.</li> </ul>
Stakeholders involved	<ul style="list-style-type: none"> <li>• Local residents and businesses, as key experts on the implementation area, need to be consulted.</li> <li>• Associations of vulnerable road users, including older people, parents with small children and the blind (especially if road demarcations are being removed).</li> <li>• Road authorities to reduce the impact on road network capacity.</li> </ul>
Undesirable secondary effects	<ul style="list-style-type: none"> <li>• Lack of demarcation for the road can make the pedestrian environment unfriendly to visually impaired people.</li> <li>• If you don't plan carefully, traffic and congestion issues might just be shifted rather than solved.</li> </ul>

*“People need and choose to walk! However, the methodological analysis of this need is often neglected. Pedestrian auditing tools and methodologies can help to measure and understand pedestrians’ needs and motivations.”*

**Daniel Sauter,  
Walking Expert,  
Urban Mobility Research,**

**Zurich, Switzerland**

*“It is important to modify the public space in favour of pedestrians, taking space from the car and trying to do it in the most efficient way with the available resources.”*

**Fermin Echarte,  
Mobility Technician,  
Donostia-San Sebastian,  
TIDE Leading City for Non-Motorised  
Transport, Spain**

## Benefits & Costs

### Benefits

#### People-friendly streets and public spaces:

- create better quality of life for the whole community with less social exclusion;
- improve traffic safety for cyclists and pedestrians of all ages and abilities;
- encourage people to shift short car journeys to walking and cycling, this can be supported by a strong environmental policy;
- provide more customers to local retailers;
- once the political direction has been set, many measures can be built into the normal maintenance budget as they do not necessarily cost more than a normal road.

### Health Economic Assessment Tool (HEAT) for cycling and walking

HEAT is an online resource to estimate the economic savings resulting from reductions in mortality as a consequence of regular walking. It is based on best available evidence, with parameters that can be adapted to fit specific situations.

HEAT calculates the answer to the following question: if x people cycle or walk y distance on most days, what is the economic value of mortality rate improvements?

HEAT can be applied in many situations. Here is an example: to plan a new piece of walking infrastructure, it models the impact of different levels of walking, and attaches a value to the estimated level when the new infrastructure is in place (this can be compared to a benefit–cost ratio).

### Costs

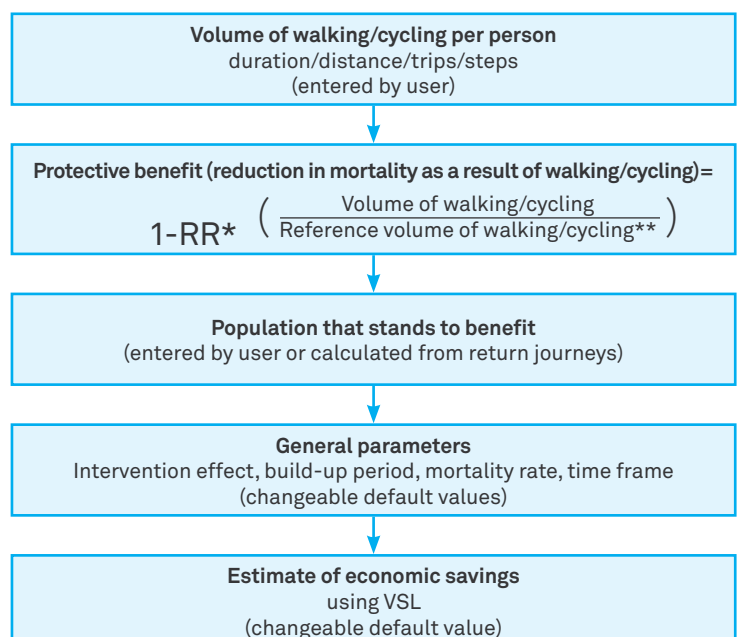
Costs depend on the measures selected. They can range from low costs measures (e.g. new regulations) to expensive infrastructure.

Ideally, the available budget should be defined in advance to give a clear framework for the planning process.

It can be helpful to allocate a lump sum for a quick and unbureaucratic response to small measures resulting from the participation process so that change is immediately visible.

#### The basic cost categories are:

1. status analysis (analysis of the existing status in the area in question and a first draft of measures to improve the accessibility to serve as a starting point for the participation process);
2. public participation (moderation and documentation of the process);
3. implementation of measures that result from the prioritization.



Basic functioning of HEAT

Source: World Health Organisation (WHO)

## Users & Stakeholders

### Users and target groups

Any measure should focus on how to make streets better for people who use them every day – rather than from the perspective of those who manage streets.

Since the assessment comes from the community itself, this perspective will lead to recommendations to local authorities for better and more ambitious schemes to address community needs.

Not only transport users are affected, but a whole range of different groups that live in the neighbourhood, visit it, provide services or do business in the area. This includes older people and mobility impaired people as well as groups or institutions (e.g. neighbourhood associations and schools).

The mobility and urban planning-related needs of these stakeholders include:

- high-quality public space and liveable neighbourhoods;
- road safety, independence and healthy mobility;
- citizen participation;
- strong local economy.

### Key stakeholders for implementation

The composition of the core project team will always depend on the specific set-up of the review and the scope of planned activities. Usually the local authority has a leading role in initiating the process.

People who represent the wider community should be invited to join the process to give the findings more credibility and impact.

A broad range of councillors and officers (transport, regeneration, town centre managers, public health, etc.) should also be invited to meetings, as well as tradespeople, police, local schools and churches.

### Living Streets Pedestrian Audit

The Living Streets Street Review Guidance is a tool which helps residents to evaluate the quality of their local streets and spaces. The review will help build a case to improve the local area – making it safe, attractive, enjoyable and a place where people want to walk.

Anyone can deliver a street review but as with most things, quality depends on the effort and organisation put in. Living Streets works to support people to achieve this for their streets across the UK.

The review includes the following eight areas: footway surfaces and obstructions; facilities and signage; maintenance and enforcement; personal security; crossing points and desire lines; road layout and space allocation; aesthetics and traffic.



Community Street Audit in Westminster

*Photo source: Living Streets*

## Assessing the potential for your city

### Is this something for us?

In general the concept of people-friendly spaces is highly transferable and there is a wide variety of participation tools and measures that can be tailored to different local situations.

#### Key conditions for implementation are:

- strong political backing and a pre-defined budget (both for the participation process and for the measures themselves);
- willingness to involve citizens and to co-operate with many stakeholders;
- internal expertise to manage the process, or budget to sub-contract to external moderators and planners.

### Pre-assessing the costs and benefits

Evaluation of walking measures is in its infancy, both in Europe and worldwide. The aim of developing a cost-benefit framework is to enable policy makers to analyse walking measures with the same level of rigour as other transport and health projects when funding decisions are being made.

#### The following quantified elements could be included in a cost-benefit analysis:

- reduced congestion;
- reduced noise pollution;
- reduced air pollution;
- reduced greenhouse gas emissions;
- health benefits.

#### A multi-criteria analysis could also be applied to include benefits that cannot easily be quantified, such as:

- improved walking environment;
- improved sojourning environment.

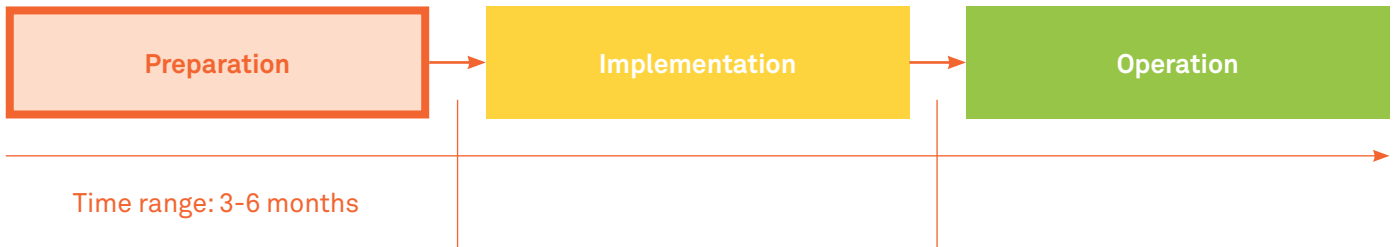


Photo: Polis



# From plan to reality

## Preparation



Creating people-friendly streets and public places requires careful preparation.

### Key aspects at this stage

#### Politically endorsed strategy

Ideally, the process is supported at the city level by a strategy to enhance conditions for walking and cycling. If no strategy is yet in place, documented street reviews can help to legitimise funding requests.

#### A local champion

While not mandatory, it is helpful to have an influential person in the community to act as a champion for the initiative. This can be a political decision maker or someone whose views are respected by decision makers.

#### Definition of aims and scope

Pedestrian friendliness can be focused on a wide area and address overall accessibility or it can be more focused on specific areas or questions. This needs to be defined relatively early on in the process.

#### Links to existing programmes

It is useful to check whether there are other transport or urban development processes or programmes that support the creation of people-friendly places and link the measure to them.

#### Establish budget framework early

A clear budget guideline in advance sets a framework for the activities. If little money is available, it is better to focus on small, less costly measures. If a sufficient budget is available, the process may include some effective and important measures with higher costs (e.g. infrastructure costs).

#### External support for planning and moderation

Local administrations often lack time and expertise to run pedestrian audits. It may be advisable to sub-contract an external planner and a communication professional for the status analysis, moderation and proposal of draft measures.

#### Success factors and barriers at this stage

When carrying out a pedestrian audit of a public space, it's important to define the assessment area; about 500 metres is ideal. It's best to choose a route which links up important destinations: shops, houses, a school or a park.

You may have to repeat the audit in the day, in the evening and/or at a weekend both to ensure the right participants can attend and to assess the street at different times.

Planners have a range of tools available to them for analysing pedestrian accessibility of an area (e.g. PERS, as applied by Transport for London – see box on p.11).



## Participation processes

An experienced moderator is recommended for public participation processes and participation should be taken seriously. Participants should be informed about the scope and scale of the resources available so that they have realistic expectations and are able to make appropriate suggestions.

Public participation should not be applied in a “light” format to justify decisions that would have been taken anyway. The process should be entered into with the awareness that input from participants has the potential to change the foreseen outcome.

Some participants may need to be reminded that their needs are not the only ones to be met. With controversial issues (e.g. parking), it can be helpful to develop wider points you can agree on – like supporting parents with prams and disabled people, or creating a better walking environment to increase footfall.

Ready for implementation?	✓
Political backing through politically adopted local strategy or local champion achieved	
Evaluation of related programmes and possible synergies with them	
Budget for participation process and measures established (if possible)	
If needed, sub-contracting of external experts to run the process (or qualified internal staff with sufficient time assigned)	
Decisions on overall participation process and timeline taken	
First contacts to important co-operation partners would be helpful	

## Walk21: International Charter for Walking

This international charter identifies the needs of people on foot and provides a common framework to help authorities refocus their existing policies, activities and relationships.

The vision of the charter is to create a world where people choose and are able to walk as a way to travel, to be healthy and to relax, a world where authorities, organisations and individuals have:

- recognised the value of walking;
- made a commitment to healthy, efficient and sustainable communities;
- worked together to overcome the physical, social and institutional barriers which often limit people’s choice to walk.

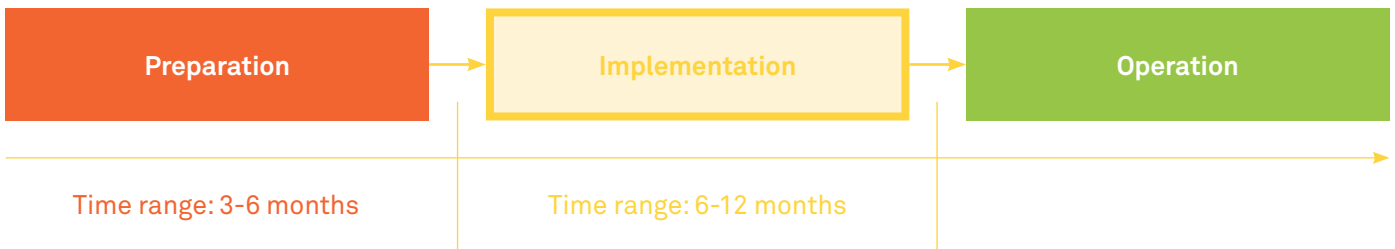
The Charter provides a practical list of improvements that can be made in most communities. The signing of the charter by a city’s mayor can kick-start a change in how walking is addressed in a city.

1. Increased inclusive mobility
2. Well designed and managed spaces for people
3. Improved integration of networks
4. Supportive land–use and spatial planning
5. Reduced road danger
6. Less crime and fear of crime
7. More supportive authorities
8. A culture of walking

International Walking Charter  
Source: [www.walk21.com](http://www.walk21.com)

# From plan to reality

## Implementation



Once the final recommendations from the participation and planning process are available, implementation can begin.

### Key aspects at this stage

#### Determining what can be implemented

It is necessary to evaluate the costs of recommendations and to clarify the funding strategy. Availability of appropriate (internal and/or external) human resources should be made clear. Legal aspects also need to be clarified. The aim is to filter out a manageable number of measures that can be expected to have a real impact.



Redcross Way Shared Space in London before and after

Source: Transport for London

### Coordination requirements

The responsibility for implementing different measures will in most cases be spread across different departments of an organisation (e.g. city administration) or even between different organisations. Political decision makers are often involved in the discussion and approval of the proposed measures. A round table that meets regularly can be helpful to ensure the various groups are able to meet and share ideas and input.

### Feedback and “quick wins”

It is important to report back to citizens on how the implementation of measures will look. It is good to include a few “quick win” measures, so that citizens see that things are really happening. This can be as simple as having signs on sidewalks removed that impair the passage of pedestrians.

### Success factors and barriers at this stage

Linking construction costs to the normal maintenance budget of the road can support the development of people-friendly streets.

It's easy to lose track of the costs when a range of interesting solutions are presented – many of which would be more effective if implemented in tandem. Failure to prioritise and plan within the scope of available resources can hinder the implementation of people-friendly streets.

## Getting concrete

Improving the pedestrian environment means taking a close-up look at areas that have potential for improvement. These can include:

- reducing the danger that vehicles present to pedestrians by managing traffic (e.g. through lower speed limits) rather than segregating pedestrians or restricting their movements;
- reducing the impact of busy roads by installing sufficient safe crossing points, ensuring minimal waiting times and enough time for the slowest pedestrians to cross;
- providing clean, well-lit streets and paths, free from obstruction, wide enough for their busiest use, and with sufficient opportunities to cross roads safely and directly, without diversion or changing levels;
- ensuring seating and toilets are provided in quantities and locations that meet the needs of all users;
- ensuring safe and convenient independent mobility for all by providing access on foot for as many people as possible;
- provide training and information for transport professionals to increase awareness of the concerns of pedestrians for their personal security and the impact of such concerns on their decisions to walk.

Link Parameters						
Effective width	Dropped Kerbs	Gradient	Obstructions	Permeability	Legibility	Lighting
-2	1	-1	-1	-2	-2	-2
Tactile Information	Colour Contrast	Personal Security	Surface Quality	User conflict	Quality of the environment	Maintenance
2	-2	-2	1	1	-1	2

PERS Analysis Tool

Photo: Transport Research Laboratories

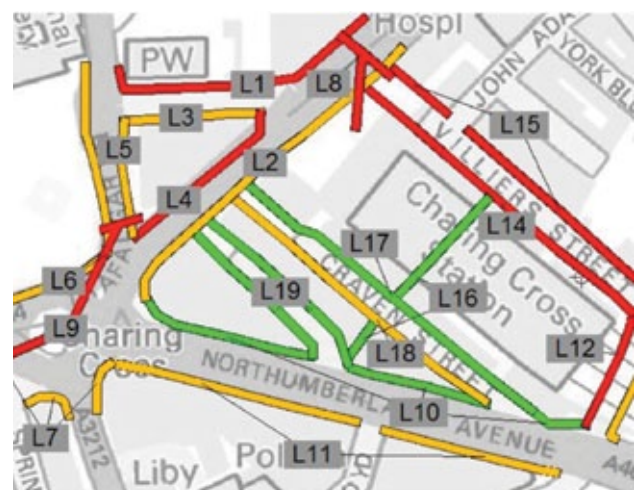
## PERS

The Pedestrian Environment Review System, or PERS, is an audit tool to evaluate walking environments. The tool consists of two main parts:

1. Check list(s) with accompanying guidance for use in the field to score environments.
2. Software used to store results and produce outputs such as graphs and reports.

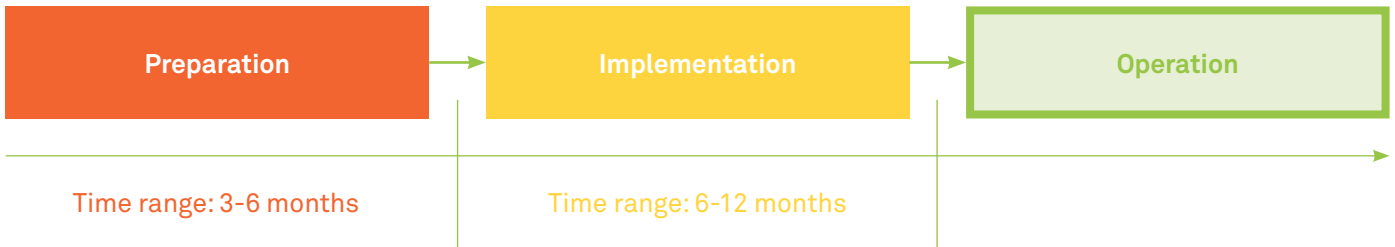
PERS has been used by Transport for London and other local authorities since the mid-2000s. It can be applied to review pedestrian links, crossings, routes, public transport waiting areas, interchange spaces and public spaces.

Although PERS uses quantitative methods when reviewing some elements of the pedestrian environment, such as footway widths or dropped kerb gradients, assessments of personal safety and quality of the environment are qualitative judgements of the auditor. This dual approach to assessing walking environments allows the “feel” of an environment as well as its physical form to be measured and assessed. This approach was widely used in the London Key Walking Routes Programme.



# From plan to reality

## Operation



### Key aspects at this stage

#### Follow-up communication, expectation management and re-examining priorities

To avoid frustration or disillusionment with public processes, it is also important to communicate which measures can be realised in the mid- to long term and which measures cannot be carried out at all (and why). This could include, for example, jurisdictional or financial issues.

If your city has policies that prioritise pedestrians and/or cyclists, this can be a good opportunity to re-examine your city's actions in relation to its priorities to ensure that you aren't "looking at the world through a car windscreen" when establishing spending priorities.

Meetings, flyers or the internet can be used as communication tools.

### Pedestrian Quality Needs Project (PQN)

The PQN identifies people's needs in terms of safe and agreeable active mobility in public space.

PQN's main objective is to determine pedestrians' needs and how those relate to structural and functional interventions, policy making and regulation to support high quality walking conditions across the EU.

### Evaluation

An evaluation of measures implemented can underline the need to create even more people-friendly streets and public spaces. A manageable monitoring and evaluation procedure can help you understand the impact of the measure and give feedback to involved stakeholders and citizens.

### Expand concept to other neighbourhoods

Based on the success of a first project, where appropriate, it is possible to implement similar measures in other parts of the city. An equitable treatment of all quarters over the long term helps to avoid pockets of more and less accessible neighbourhoods.

### Success factors and barriers at this stage

- Regular maintenance can keep a people friendly street operational.
- Follow up with stakeholder groups is useful to ensure the desired effect has been achieved.
- Lack of enforcement can lead to cars take over the space again.



Public space analysis in a park in Zurich  
Source: Daniel Sauter

## Further information & contacts

### Further information

- **Shared Space:**  
[www.shared-space.org](http://www.shared-space.org)
- **ACTIVE ACCESS project:**  
[www.active-access.eu](http://www.active-access.eu)
- **Pedestrian Quality Needs:**  
[www.walkeurope.org](http://www.walkeurope.org)
- **PERS:**  
[www.trl.co.uk](http://www.trl.co.uk)
- **London Key Walking Routes Programme:**  
[www.tfl.gov.uk/assets/downloads/what-is-pers-factsheet.pdf](http://www.tfl.gov.uk/assets/downloads/what-is-pers-factsheet.pdf)
- **Living Streets community street audits:**  
[www.livingstreets.org.uk/professionals/working-with-communities/community-street-audits](http://www.livingstreets.org.uk/professionals/working-with-communities/community-street-audits)

### Further TIDE training on this measure:

Webinars and e-learning courses

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Photo on title page: [www.eltis.org](http://www.eltis.org)

### Contacts

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## About TIDE — Transport Innovation Deployment for Europe

The European TIDE project aims to foster a more favourable climate for cities and regions to integrate innovations in their urban mobility policies. This should lead to increased acceptance and take-up of new urban transport solutions and technologies. TIDE will help cities and regions to address common challenges in a collaborative and integrated way.

### Why should you care about innovation?

On several occasions, European cities have indicated that innovation can help to tackle challenges resulting from the economic crisis. Innovation can save costs as well as contribute to reaching urban policy goals. Still, cities lack resources to conclude a full innovation cycle.

Innovative ideas usually start in one or just a few places before they reach wider coverage. TIDE will help cities and regions across Europe to shorten the path towards the implementation of innovative measures by showing that it is not necessary to re-invent the wheel and much more effective to exchange on innovation and transfer successful solutions from one European region to another. TIDE thus offers a cost-efficient way of spreading innovation throughout Europe

### Our mission – Guided by your needs!

TIDE will enhance the broad take-up of 15 innovative urban transport and mobility measures throughout Europe and will make a visible contribution to establishing them as mainstream measures. The TIDE partnership is making a range of new and feasible solutions more easily accessible, to address key challenges of urban transport such as energy efficiency, decarbonisation, demographic change, safety, access for all, and new economic and financial conditions.

TIDE focuses on fostering awareness, advancing expertise via tried and new tools, practical work with cities, and costs and benefits. The needs of practitioners in European cities are thereby a guiding principle. TIDE is actively supporting 15 committed cities to develop implementation scenarios for innovative urban transport measures, setting the example to an even wider group of take-up candidates. These measures cover the following five TIDE themes: new pricing measures, non-motorised transport, advanced network and traffic management to support traveller information, electric mobility, and public transport organisation.

## The TIDE innovative transport measures

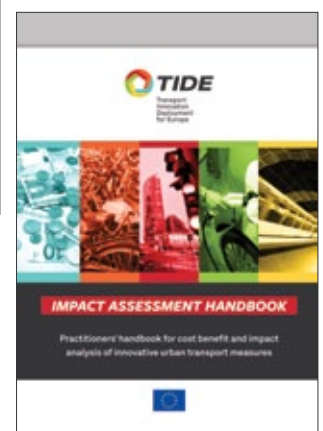
TIDE covers fifteen innovative measures across the five TIDE-themes.

<b>New pricing measures</b>	<ul style="list-style-type: none"> <li>• Road user charging in urban areas</li> <li>• Parking charge policies</li> <li>• Efficient and convenient pricing and charging for multimodal trips</li> </ul>
<b>Non-motorised transport</b>	<ul style="list-style-type: none"> <li>• Bicycle parking schemes</li> <li>• Creating people-friendly streets and public spaces</li> <li>• Fast cycling lanes</li> </ul>
<b>Advanced network and traffic management to support traveller information</b>	<ul style="list-style-type: none"> <li>• Open data server for applications-based traveller information</li> <li>• User-friendly human machine interface for traveller information</li> <li>• Advanced priority systems for public transport</li> </ul>
<b>Electric mobility</b>	<ul style="list-style-type: none"> <li>• Clean city logistics</li> <li>• Financing schemes for charging stations</li> <li>• Inductive charging for public transport</li> </ul>
<b>Public transport organisation</b>	<ul style="list-style-type: none"> <li>• Creation of public transport management bodies for metropolitan areas</li> <li>• Contracting of services focused on improving passenger satisfaction and efficiency</li> <li>• Marketing research as optimisation tool in public transport</li> </ul>

The **TIDE Innovation Toolbox** brochure highlights these fifteen inspiring transport measures and illustrates them with good practice examples, listing characteristics and benefits, key aspects for implementation, and useful references.

The **TIDE Practitioner Handbooks** on Transferability and Impact Assessment provide methods and examples to help understand the local potential for innovative measures in urban transport.

The **Guidelines for Implementers** are ten individual implementation guideline brochures addressing the full implementation process of ten of the fifteen TIDE innovative measures, as well as their costs and benefits, stakeholders to be involved, etc., illustrated with good practice examples.





## The mission of the TIDE project

is to enhance the broad transfer and take-up of 15 innovative urban transport and mobility measures throughout Europe and to make a visible contribution to establish them as mainstream measures.

TIDE focuses on 15 innovative measures in five thematic clusters: financing models and pricing measures, non-motorised transport, network and traffic management to support traveller information, electric vehicles and public transport organisation. Sustainable Urban Mobility Plans are a horizontal topic to integrate the cluster activities.

## The TIDE team

The TIDE consortium is composed of a variety of experts in the field of urban transport, bringing in the knowledge of the academic sector, the experience of cities, the expertise of consultants and the multiplier effect of European networks.



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City of Rotterdam



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