A short introduction to the EU cycling guidelines

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C4. Reaping the health benefits of walking and cycling
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“Guidance for Cycling Projects in the EU”

- Undertaken for European Commission’s DG MOVE
- December 2017 to May 2019
- Accessible from: https://ec.europa.eu/transport/themes/urban/cycling_en
- Aim to: To develop guidelines that will foster the implementation of measures to promote cycling which are appropriate to the local context of cities
- Partners:

  [Ricardo Energy & Environment]

  [FGM AMOR]

  [TEPR]

  [EU Funded Cycle Projects]
Guidelines for cycling infrastructure

Where do I start?

What measures are available?

What will work in my city?

What are the issues faced by my city?

What are the impacts of cycling measures?

What has worked elsewhere?

What will work in my city?
Guidelines for cycling infrastructure

- Online, interactive guidance at the EU level
- Bringing together existing guidance on cycling infrastructure
- Enabling easier searching, filtering and digestion of the information
- Guidance tailored to a city’s background
Supported by 20 city case studies

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<th>Metropolises (over 2m)</th>
<th>Medium urban areas (0.1-0.5m)</th>
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<td>Large urban areas (0.5-1m)</td>
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**Key**

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<th>North, North West</th>
<th>Under 5%</th>
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<td>Baltics, Eastern, Central</td>
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What does the guidance look like?
Overview

Overview of guidance

EU cycling policy background

Specific challenges that cities face and how cycling helps

Planning for cycling in cities

Cycling infrastructure quality design guidance

Cycling measures

- Preparing city cycling strategies and plans
- City Visions - What type of city do I want my city to be?
- Developing a cycle network for your city
- Selecting cycle facilities

- Basic quality design principles for cycle infrastructure and networks
- Existing cycle infrastructure quality design guidance (and standards)

- How to use the cycle measure factsheets
- Selecting cycle measures for your city - Further considerations for applicability
- Cycle measures factsheets

Summary of successful implementation of Policy evaluation and development tools cycling measures

EU Funded Cycle Projects

- Health Economic Assessment Tool (HEAT) for walking and cycling
- Sustainable Urban Mobility Plans (SUMP) and cycling
- BYPAD - Bicycle Policy Audit
- Cycling solutions
Specific challenges and the role of cycling

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What measures are in the guidance?
Infrastructure, including parking

Photo credits: City of Copenhagen (Ursula Bach); Cyclepods (Brighton’s cycle hub)
Information and promotion

A kerékpár nyergében / On the bike

- Főhálózat / Main network
- Városi zöld út / Urban greenway
- Hegykérekpáros útvonal / Mountain bike path
- EuroVelo 6 útvonal / EuroVelo 6 route
- Burkolaton, nehezen játható, nem kijelölt útvonal / Unpaved, unmarked or difficult section
- Egyirányú útvonal / One-way bicycle route
- Forgalomszámító detektor / Bicycle traffic counter
- Kis forgalmú útszakasz / Low-traffic street
- Egyéb út, utca / Ordinary road or street
- Útvonal nagy gépjárműforgalommal / Routes with heavy road traffic
- Nem kerékpározható útszakasz / No cycling
- MOL Bubi gyűjtőállomás / MOL Bubi docking station

Photo and image credits: BKK (Budapest), Cities of Bolzano and La Rochelle, Ricardo (for Bregenz)
Conditions for encouraging cycling

Image and photo credits: City of Malmö
Data collection
Data collection

Services

Photo credits: City of Copenhagen (Ursula Bach); BTN Bikeshare; federation.cyclelogistics.eu/
An example of a measure
Cycling measures: Example

6.1 Bicycle sharing schemes, including rental

Overview

Public bike sharing schemes provide access to bicycles for both residents and visitors for use in a city without the need to own a bicycle, or bring their own bicycle to the city, which in turn increases the visibility and profile of cycling in the city. Rental options provide a similar service, although are generally smaller, less widespread and are privately owned and operated.

In-depth measure analysis, case studies and further guidance

- Detailed description of the measure
- Case Studies
- Key guidance, further reading and references
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Considerations for applicability

- **Level of cycling**
- **Urban layout/topography**
- **Population**
- **Financial resources**

**Level of cycling**

Bike share schemes can be introduced in a city with any level of cycling. However, they are often introduced in cities with low levels of cycling in order to increase the level of cycling and to increase the profile of cycling within the city.

**Urban layout/topography**

Bike share schemes and rental services using traditional bicycles are more likely to be effective in relatively flat areas. The inclusion of electric bicycles in a bike share scheme or rental service can help in areas where the local topography specifically hilly, are intended to be a barrier to cycling. Electric bicycles can enable larger distances to be travelled, so could enable a bike share scheme to cover a larger geographical area.

**Population**

Any member of the population could potentially use a shared or rental bicycle. Students and tourists could be potentially important customers of a bike sharing scheme. Students might be interested in cycling but might not have the space to store their own mountain bike, might be interested in cycling, but may not own a bicycle with them. In order to enable tourists to use the scheme, it will be important to have short-term registrations and/or use. Rental services are often targeted at tourists.

**Financial resources**

The cost depends on its size and funding model. Bicycle rental and free-floating bike share schemes (otherwise known as 'dockless bike sharing') can come at no cost to local authorities (where they are run by private companies). At the other end of the scale, the cost of a bike share scheme could be significant, although there are models that are potentially low direct cost to the city authority (as in the case of Sheffield and Liubliana).

- The cost of a bike share scheme with a very small number of bikes and a single docking station could cost around £200,000, whereas a scheme with hundreds of stations could cost between £1 million and £2 million.
- The annual operation costs of a scheme – i.e. to operate and maintain the system - could amount to between £1,200 and £1,500 per bike per year.

**Time & human resources**

The time and human resources needed from the local authority depends on the model used. The local authority will need to engage with operators of bike share schemes, no matter what model is used, even for free-floating schemes. Bike rentals are usually private and so will need limited public authority input.

For free-floating bike share schemes, the time needed might be limited to making sure that the schemes do not adversely affect the urban environment by blocking routes and access.

If the operation of a bike share scheme is undertaken by the local authority, it will be a lot more time- and resource-intensive compared to implementing the scheme in close collaboration with a company or contracting out the day-to-day operations.
Cycling measures: Example

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In-depth measure analysis, case studies and further guidance

- Detailed description of the measure

Key features

In bike share schemes, bicycles are made available for members of the public to use for limited periods, after registration and payment. All systems have bicycles that can be used in return for payment, so a registration and payment system is required, which is increasingly electronic. Most systems also have docking stations or hubs where bicycles need to be or are encouraged to be left, depending on the extent to which the technology is either on the bicycle or on the docking stand. Dockless bike sharing schemes – facilitated by electronic tracking and payment – are becoming popular in some places.

Bicycle rental schemes allow individuals to rent a bicycle for a period of time for a fixed fee. Bicycles are usually rented from and returned to the same manned location. However, some larger schemes have a number of collection/drop off points within a city/region. They are aimed primarily at tourists, although can also be used by citizens and commuters.

Bicycle rental schemes differ from bike sharing schemes in that the user typically (but not always) collects and deposits the bicycle from the same location and the bicycle is usually used for a longer period of time (e.g., half a day or a full day compared to the short periods that normally characterise bike sharing). Additionally, one bike is used for the whole rental period, whereas a bike share user could use multiple bikes on a number of one-way journeys in the same time period.

Key features

Function and objectives

Complementary measures

Performance

Parameters of success

Key lessons for transferability
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### Cycling measures: Example

#### Publicly-owned bike share scheme (Budapest, Hungary)
- **Locations**: Belville, Eastern, Central
- **Population**: Metropolis (1.7 million)
- **Cycling Modal Share**: Starter (2%)

Budapest’s MOL Bubi scheme is owned by MOL, the Centre for Budapest Transport that is responsible for elements of Budapest’s transport system. Bubi owns all of the scheme’s docking stations and bicycles, as well as its software. Most of the scheme’s operation is also done in-house, apart from the redistribution and maintenance of the bikes and some IT services, which are contracted out. MOL Bubi started in 2014 with 1,100 bikes and 76 docking stations. Each bicycle has an onboard computer and an electronic lock. After two years, the scheme had 112 stations, nearly 1,000 bicycles and 4,000 registered users who together undertake between 1,000 and 4,000 trips a day. Various subscriptions and passes are available, ranging from a day pass to an annual subscription. The scheme appears to be popular with visitors, as one third of the registered users, and 10% of trips, are associated with a foreign mobile number. MOL Bubi has generally been welcomed by the city’s residents.

**Photo:**

**Credit:** BKK Centre for Budapest Transport

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<td>Guidance for free-floating bicycle services (Berlin, Germany)</td>
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Velocitta (2017) "Ten Golden Rules for Bike Share Schemes" [ten_golden_rules_for_bike_share_schemes](#)

PEBBS (2017) "Policy Framework for Smart Public-Use Bike Sharing"

Antoniades and Chrysanthou (2009) "European best practices in bike sharing systems", report produced as part of 'Students Today Citizen Tomorrow' project, co-funded by the EU's Intelligent Energy Europe Program (IEE); includes case studies [european_best_practice_bikesharing](#)


GTZ (2010) "Public Bicycle Schemes", recommended reading and links [giz_supt_public_bike_schemes](#)

Midgeley (2011) "Bicycle-sharing schemes: Enhancing sustainable mobility in urban areas", Background paper produced for the United Nations Department of Economic and Social Affairs [un_background_paper_bicycle_sharing_schemes](#)

NACTO (2016) "Bike Share Station Siting Guide" [nacto-bike-share-siting-guide](#)

UITP, ECF, PEBBS (2017) "Unlicensed dockless bike sharing", Position paper [ecf UITP dockless_bikesharing_position_paper](#)


ECF, Bike Sharing Schemes webpage, available at: [https://ecf.com/what-we-do/urban-mobility/bike-share-schemes-bss](https://ecf.com/what-we-do/urban-mobility/bike-share-schemes-bss)

Guidance for Cycling Projects in the EU

Welcome to the Commission’s guidance for cycling projects in the EU.

The intended users of the guidance are practitioners in city authorities with responsibility for cycling and/or sustainable transport. It is hoped that it is also of interest and use for other stakeholders connected to cycling in cities.

The guidance for cycling projects in the EU is directed to relevant existing EC-funded projects, guidance, best practice and other publications that have been produced within Europe.

Where appropriate, high level advice is supported by the use of case studies, which have been developed for the purposes of this guidance.

Particular focus has been given to the collection of information and guidance on cycling measures, again supported by case study information.

This guidance has been based on the support study “Guidance for Cycling Projects in the EU” undertaken by Ricardo Energy & Environment (UK), EDA-MARAC (AT) and TERR (UK).

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Thank you for listening - Any questions?
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www.tepr.co.uk

https://ec.europa.eu/transport/themes/urban/cycling_en (accessible from here)

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